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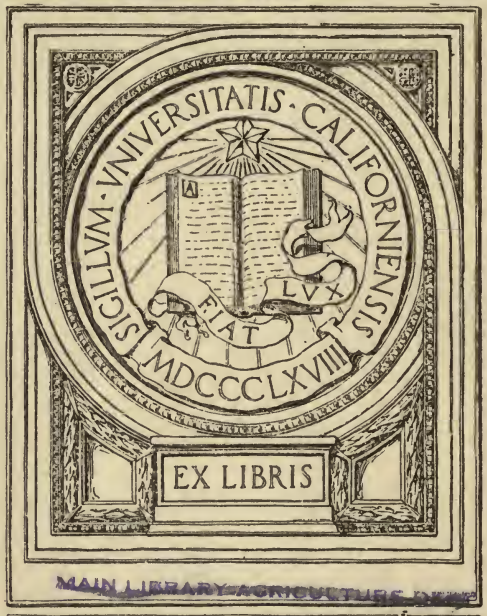

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DEPARTMENT OF AGRICULTURE,
NEW SOUTH WALES.

SCIENCE BULLETIN, No. 15.

July, 1918.

THE FOOD OF AUSTRALIAN BIRDS.

AN INVESTIGATION INTO THE CHARACTER OF THE STOMACH AND CROP CONTENTS.

A SUMMARY OF WORK DONE BY

J. B. CLELAND, M.D., Principal Microbiologist, Department of Public Health.

J. H. MAIDEN, Government Botanist of New South Wales, and Director, Botanic Gardens, Sydney.

W. W. FROGGATT, F.L.S., Government Entomologist.

E. W. FERGUSON, M.B., Ch.M., Assistant Microbiologist, Department of Public Health.

C. T. MUSSON, Lecturer in Botany and Entomology, Hawkesbury Agricultural College.

Workers in the respective branches of Economic Science covered by this series of Science Bulletins will receive such of them as may be of use in their special branches of study upon application to the Under Secretary and Director, Department of Agriculture, Sydney.

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NOTE.

The matter contained in this Bulletin was originally collected and arranged with a view to publication about April, 1915. Various circumstances connected with the war have delayed publication until the present time.

DEPARTMENT OF AGRICULTURE,
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THE FOOD OF AUSTRALIAN BIRDS.

An Investigation into the Character of the Stomach and Crop Contents.

J. B. CLELAND, M.D., Pincipal Microbiologist, Department of Public Health.

Introduction.

WHEN systematic investigations were undertaken with the object of attempting to control the blow-fly pest in sheep, it was realised that various birds might play an important part in keeping these flies in check. It was, therefore, decided to make an examination, as extensive as possible, of all birds in sheep-breeding districts which might play a possible part in this direction.

As a considerable amount of data had already been accumulated with regard to the food of Australian birds in general, it was decided to incorporate in one complete Bulletin all the information in our possession as regards the food of wild birds in Australia, which would comprise also the information obtained more directly in connection with the blow-fly investigations.

The present Bulletin is the result of an analysis of the various data thus collected. In addition to proving of value to breeders of sheep, it is trusted that it will be found of considerable use to orchardists, wheat growers and gardeners, as well as to those in charge of our forests.

The information has been arranged in various ways, so as to meet the needs, as far as possible, of those consulting the Bulletin. There is, first of all, a short summary of the food of, and a verdict on, various birds or groups of birds, the most important being taken first. This is followed by lists indicating the birds which feed on particular kinds of food of more or less economic importance, the birds in some cases being injurious to human interests, and in other cases aiding the work of man.

In Appendix I will be found a tabulated examination of the contents of the stomachs and crops of each *species* of bird examined. Full details are given of the animal and vegetable food, and remarks are appended opposite the species, amplifying these details. Appendix I has been compiled from detailed information given in Appendices II and III, which latter show the actual food found in the case of each individual bird examined.

Appendices II and III should prove of great value to future workers in this interesting economic field, inasmuch as they form a basis showing the food of individual birds, which can be added to from time to time as further birds are examined, and then when a sufficient number of these are available, a tabulated examination such as appears in Appendix I could be again drawn up indicating the food of various species of birds in the light of more extended experience. Obviously before any individual species of bird can be rightly assessed economically from the point of view of its food habits, a large number of individuals, preferably several hundred, must be examined in detail. To enable the results of previous workers to be added to the investigations of later workers, the data as regards individual birds must be available, as a summary of the food of a species will not necessarily indicate the proclivity of the individuals of that species to feed on a particular food.

The thanks of the compilers of this Bulletin are due to the gentlemen whose names are mentioned in the introduction to Appendices I and II on page 22, who have so materially assisted in the work by forwarding specimens of birds for examination. To the cordial co-operation of botanists, entomologists, ornithologists, and other workers in special branches of Natural History, the present Bulletin owes much of its value. The result shows again the important bearing the different sciences have upon each other, and how all work together to the ultimate good of the whole community when brought to bear in practical application to meet the needs of our primary producers.

Broad Summary of Results, especially from the Point of View of the Blow-fly Pest in Sheep.

The value of these examinations would have been much enhanced could a greater number of birds have been examined. From the results obtained, however, the following summarised results may be given as being of most importance from the point of view of the investigations into the blow-fly pest.

Sparrow and Starling.—Though useful to a slight extent, they do much more harm than good. There is not the slightest prospect of their ever being eliminated from Australia. Their presence should not in any way be fostered, and, according to circumstances, most energetic means may be adopted to ensure their destruction in localised areas, provided such means do not jeopardise the lives of useful native birds. Neither the starling nor the sparrow apparently plays any definite part in controlling the blow-fly pest.

Crow.—Whilst doing marked harm at times, the crow undoubtedly is on other occasions of decided value. By destroying dead carcases it tends to prevent the multiplication of the blow-flies that blow sheep. It is a bird that can practically never be exterminated, on account of its wary habits. Before any sheep-owner decides to adopt energetic measures to destroy it in his neighbourhood he should carefully calculate as to whether its value in his particular instance is not greater than the losses caused by it.

Other Birds.—Of the large number examined, with the exception of one or two notorious exceptions, the vast majority serve a more or less definitely useful purpose in maintaining the balance of nature as regards the various species of insects, and therefore should be encouraged to the utmost possible extent. Only a very few have been found to feed on blow-flies, and as these do so only occasionally they can play no definite part in controlling this pest.

Detailed Summaries and Verdicts on Individual Birds or Groups of Birds.

Crows.—For many years ornithologists were under the impression that there were two common species of crow in the southern parts of Australia—*Corvus coronoides,* the hazel-eyed crow, and *Corone australis,* the white-eyed crow or raven. A quite distinct species, Bennett's crow, is much smaller and rarer. The two common species of crow were also considered to differ as regards the fluffy bases of the feathers of the neck, being white in one and greyish-white in the other. Gregory Mathews has recently gone into the question fully, and considers that in New South Wales, at any rate in the middle and southern parts, only one species of bird is concerned, the hazel eyes becoming eventually white. The question is still under consideration, but it is more or less of technical importance only since the habits of the two species, if they are distinct, are apparently identical. The thirty-eight crows dealt with in the report have, therefore, all been placed under one specific name, *Corvus coronoides.*

An analysis of the stomach contents of these thirty-eight birds shows that occasionally they eat wheat, maize and oat grains, and field peas. Their depredations in this direction are, however, insignificant. As regards animal food apart from carrion, mice were found in three crows, grasshoppers in six, the larvæ of various moths (including in one case cutworms) in five, and blow-fly maggots or pupæ in two. All these items of animal food comprise creatures more or less injurious to human undertakings, but the amount of these pests destroyed by the crows does not amount really to very much, though the Entomologist states that he considers it one of the most valuable insectivorous birds in the western country, as well as being a scavenger. The latter statement, that the bird is a scavenger, is the chief point in its favour. By tearing the carcases of sheep and cattle to pieces to obtain its food it tends to destroy mechanically a number of fly maggots, whilst others are scattered around and exposed, often to a hot sun; moreover, the carcase itself is more or less torn and broken up so as to dry more rapidly, thus rendering it unsuitable as food for the larvæ of blow-flies.

Summed up, as the result of these investigations the crow may be said to be, on the negative side of the ledger, negligibly injurious from the point of view of eating crop grains; on the positive side of the ledger, somewhat useful as occasionally destroying mice, grasshoppers, moth larvæ, and blow-fly maggots, and very useful in helping to dispose of carrion, thereby tending to prevent the breeding of blow-flies therein. As a set-off to the latter, the experience of sheep-owners that crows frequently destroy the

eyes of tired or enfeebled sheep or lambs acts as a grave countercheck to its value. The crow, in fact, may be summed up as being almost equally good and bad, and local circumstances should always be taken into consideration before active measures are undertaken for its destruction. It seems doubtful whether it should be proscribed throughout the State as an entirely undesirable bird.

The Starling.—The stomachs of seventy-three of these introduced birds were examined. They were obtained from various parts of the State, especially Wagga, Uralla, and Richmond. As regards the vegetable food of those examined, wheat grains were found in a few and fruit in one. This result, however, does not by any means indicate clearly the destructive tendencies in the direction of vegetable food, as the accessibility of such food must be considered at the time the bird was shot. Unquestionably starlings feed greatly on cultivated fruits and on cultivated grains during the season when these are available.

As regards the insect food of these seventy-three birds, we found that locusts or grasshoppers were present in five, wireworms in two, cutworms in thirty-four, flies in four, psyllids in one, and scale (?) in one. The cutworms were found in most of the starlings obtained in the Wagga district, these having been shot while this pest was present. Flies were found in four. These could not be identified as blow-flies. It is, however, likely, though not proved as yet, that the starling does destroy a few of these insects. As indicated by the list of insect foods, the starling can unquestionably play a useful purpose in the direction of destroying insect pests.

Summed up, it may be stated that the starling does marked harm to fruit gardens and that it does some harm to crops, but that it does some good in destroying certain insect pests, such as cutworms, when these are present in abundance and perhaps other food is scarce. The starling has spread very extensively over Australia, and it is a prolific breeder. Moreover, it interferes with the breeding-places of many of our useful insectivorous birds. It is also so wily and so hard to approach that it will never be possible to eliminate it from Australia, or even to diminish materially its numbers, whatever human means are adopted to attempt this. Its virtues are unquestionably less than its defects, and no encouragement whatever should be given to its appearance in any part of the country. On the other hand, any discouragement offered is likely to have little effect.

The Sparrow.—One hundred and twenty-seven sparrows were examined, the majority of them coming from Richmond, New South Wales. Sixty-four were found to feed on wheat and maize. Various grass seeds were found in others. Occasionally they have been found to feed on white ants, cabbage-moth larvæ, cutworms, locusts, blow-flies, and aphids. The large amount of grain eaten far outweighs any value that the sparrow may have as an insectivorous bird during the period when such grain is available, but during other seasons of the year it probably plays a mildly useful part. Attempts at eradication seem to have little effect upon it, but they should be persisted in as far as possible without endangering other birds.

The question as to whether we would be worse off without any sparrows than with them is apparently negatived by the position in Western Australia. The sparrow up to the present time has not reached Western Australia, and yet that State is not any worse off than the Eastern States through their absence. It may be pointed out that whatever attempts are made to destroy sparrows entirely they are bound to be unsuccessful, though the numbers may be materially reduced.

Magpies.—Though occasionally eating wheat, magpies are more essentially insectivorous, frequently feeding on locusts or grasshoppers, fly larvæ, &c. They should be rigidly protected.

Magpie Lark.—This bird occasionally feeds on maize and wheat obtained near fowl-yards, &c., but it is doubtful whether it touches crops. It is also found to eat plague locusts, grasshoppers, cockchafer larvæ, &c. It is one of our foremost useful birds.

Butcher Birds.—These are found frequently to feed on grasshoppers, as well as moths, and in spite of occasionally destroying small birds are obviously useful.

Silver-eyes.—The stomach contents of fifty-five Silver-eyes have been examined. Forty-five of these contained vegetable food, chiefly fruits of various kinds. Thirty-two contained insect food. Amongst the insects occasionally eaten were cabbage moths, froghoppers, psyllids, thrips, aphids, black scale, and plant bugs. During the fruit season there is not the slightest question that the Silver-eye does a very considerable amount of damage to orchards. By feeding on the fruits of such pests as blackberries and lantana and passing the seeds in their droppings, Silver-eyes act as potent disseminators of these and other plants. However, during the season when fruit is not ripe they apparently serve a definitely useful purpose in destroying certain insect pests. As energetic measures adopted for the destruction of Silver-eyes have never yet been successful in materially reducing their number in any locality there is little likelihood, whatever action be taken, of eliminating this bird from any particular part.

From an assessment of its value it may be safely stated that energetic means should be adopted to keep the birds away from fruit during the fruiting season; in this way the fruit may be saved, but these attempts are not likely to successfully eliminate all the birds from the orchard affected. The birds that remain will during the rest of the year serve the orchardists in good stead by helping to keep down insect pests.

Quails.—Of the four species of quail examined three showed that they fed on grass seeds and occasionally wheat grains; the amount of grain eaten is probably negligible, especially when it is considered that quail are never very plentiful.

Pigeons and Doves.—These are seed and fruit eaters, and none are of definite economic importance either as useful or obnoxious birds.

Pectoral Rail.—This bird appears of some value, as grasshoppers and cutworms have been found in the stomach contents.

Plovers.—The spurwing and black-breasted plovers apparently feed extensively on insects, included amongst which are some harmful species such as cutworms. They are evidently useful birds to be encouraged.

Water Birds (Dottrells, Stilts, Coots, Grebes, Herons, Ducks, &c.).—None of these can be considered of definite economic importance one way or the other, with the exception of the Straw-necked Ibis, whose very great value in eating locusts and other grass-eating pests is well known.

Hawks.—Some of these birds are useful in destroying mice and sparrows, as, for instance, the Black-shouldered Kite, as well as the Brown Hawk and the Little Kestrel (*Cerchneis*). The Brown Hawk and the Kestrel also eat locusts and grasshoppers, whilst the Black-cheeked Falcon eats cicadas. Some of the larger species, of course, do harm in destroying chickens and useful small insectivorous birds. We have had no opportunity of examining the stomach contents of the Eagle-hawk, but from reports this is known to be at times a highly destructive bird to sheep.

Owls.—Three species of owls were examined; all showed the presence of insect food. They are useful in feeding on grasshoppers and beetles, as well as in destroying mice.

Parrots and Cockatoos.—These are chiefly seed and honey eaters. Grain seeds were found in white cockatoos, which are known to be very destructive frequently to crops. Galahs similarly feed on useful grain. Two Pennant's Parrakeets shot at Wagga had apparently been feeding on cultivated olives.

Frog-mouths (Mopokes).—These birds feed extensively on insects, amongst which grasshoppers were noticed. They are probably highly useful.

Dollar-bird.—This is evidently a very useful species. It feeds on cicadas, army-worm moths, &c.

Kingfishers.—The stomach contents of three Laughing Jackasses examined showed the presence of grasshoppers in one, and beetles in all three. In addition, therefore, to small snakes and mice this bird would seem to be a fairly consistent insect feeder. It is obviously a very useful species.

The Sacred Kingfisher also feeds on locusts and grasshoppers as well as beetles, and is a useful bird.

The Bee-eater.—The chief food of this bird is essentially bees; as is well known, it may be exceedingly destructive in this connection. The occasional injurious insects that it eats probably in no way compensate for the bees destroyed.

Cuckoos.—All the cuckoos are evidently highly useful insectivorous birds, feeding especially on various caterpillars. One Pallid Cuckoo, for instance, had twenty-five cutworm larvæ in its stomach. Their useful propensities are to a certain extent counterbalanced by the loss of young insectivorous native birds thrown out of the nests of the foster parents by the young cuckoo.

Swallows.—These are all very useful from their insectivorous habits. House flies have been found in the House Swallow. They destroy large quantities of mosquitoes and gnats whilst hawking over the water.

Jacky Winter.—This bird is obviously useful, as shown by the variety of the insect contents of its stomach, amongst which blow-flies appear.

Robins.—Their food consists of beetles, ants, flies, grasshoppers, &c. They are all useful species.

Fly-catchers, Fly-eaters, &c.—All these birds are useful, some highly so, especially the Wagtail and the Restless Fly-catcher, and the White-shouldered Fantail—all common birds. The Willy Wagtail, or Shepherd's Companion, may frequently be seen perched on the backs of sheep, cattle, and horses, from whence it makes frequent rapid sorties around the legs of the animals, securing the biting stable fly (*Stomoxys calcitrans*), bush flies, and probably March flies and blow-flies.

Cuckoo Shrikes and Caterpillar-eaters.—The Black-faced Cuckoo Shrike, sometimes called the Rainbird or Blue Jay, feeds on locusts or grasshoppers, stinging caterpillars, cockchafers, &c. The other species of Cuckoo Shrikes and the Caterpillar-eaters are also highly useful.

Other Perching Birds.—The Ground Thrushes, Babblers, Grass-birds, Warblers, Tits, Wrens, and Wood Swallows are all without exception useful birds, destroying large numbers of insects, some of which are injurious. The almost complete absence of the smaller native birds in the neighbourhood of large cities probably accounts for the sick appearance often presented by eucalypts in such situations. These trees near the crowded habitations of man are not searched daily by our smaller native birds for the various insects feeding upon them, and in consequence these insects increase in number and the tree suffers in health.

The following species may be singled out from amongst this large number of birds as of special value:—

Ground Thrushes.—These ground hunting birds sometimes feed on locusts or grasshoppers, moth caterpillars, &c. Occasionally wheat grains are eaten. They probably serve a very useful purpose in scavenging the ground for insects.

Scrub Wren.—This bird hunts on the ground for insects, much like the Ground Thrushes.

Coachwhip Bird.—Maggots and flies have been found in the stomach contents, as well as plant bugs. It probably eats many injurious insects on the ground.

Babblers or Twelve Apostles.—These insectivorous birds occasionally feed on locusts, plant bugs, &c.

White-fronted and Tri-coloured Chats.—These are evidently very useful birds, as shown by their feeding on the larvæ of cabbage moths, locusts, &c., and even blow-flies. They frequent open country.

Tits.—The little Acanthizas are usually found on the eucalypts. They probably play a useful part in keeping these clean from insect pests, but otherwise are not of much importance, except the Chestnut-rumped, Yellow-

rumped, and Buff-rumped Tits, which have been found to feed occasionally on psyllids, thrips, aphids, cutworms, &c., as well as occasionally on nettle seeds.

Wrens (Blue Wren, &c.).—The Common Blue Wren sometimes feeds on cutworm larvæ, flies, plant bugs, &c. All these wrens are insectivorous. In gardens the Blue Wrens feed upon aphis, small moths, flies, &c., and hunt every bush.

Wood-swallows.—These are essentially insectivorous—wasps and bees are frequently eaten by them, blow-flies occasionally, and sometimes cutworms. The Wood-swallows are often found in mobs of a thousand or more feeding upon the swarms of young "hoppers" (locusts) just as they commence crawling about. They have been seen to clean out large swarms.

Native Thrushes.—These are in general very useful birds, and in particular feed occasionally on caterpillars and grasshoppers.

Thickheads.—The Thickheads are essentially insectivorous. As they feed occasionally on grasshoppers, moth caterpillars, plant bugs, and frog-hoppers, they help to keep down such pests.

Yellow Robin.—A useful destroyer of caterpillars, small moths, &c., on foliage.

Tree-runners and Tree-creepers.—These birds confine their attention to searching the trunks of trees for insects, and apparently play a useful part in keeping our timber trees free from pests.

Pardalotes or Diamond Birds.—These sometimes feed on thrips, aphids, and scales. They spend most of their time in gum trees. It is probable they are of more use in protecting these than in protecting fruit trees.

Honey-eaters.—The large group of honey-eaters, conspicuous denizens of the Australian bush, are essentially insectivorous, though often feeding chiefly on the honey secretions of flowers, and in a few instances feeding on fruits and seeds, as in the case of the Yellow-eared Honey-eater, Yellow-faced Honey-eater, and Singing Honey-eater. In the majority of instances they are not of specific economic importance, save in a general sense of keeping down the multiplication of insects of many kinds. Some of the larger honey-eaters, however, especially the Minah, are of a decided value. At the Blow-Fly Experiment Station at Uralla, the Noisy Minah was found to catch blow-flies around the camp as well as to eat maggots in carcases. In the fruit-growing districts, however, it will feed on grapes and soft fruits. Minahs have also been found to feed upon cutworms, plant bugs, &c.

Ground Lark.—Ground Larks sometimes feed on wireworms and cutworms, as well as on grass and wheat seeds. They are obviously useful.

Grey Jumper or Happy Family.—These birds chiefly feed on grass and wheat seeds, but also destroy a large number of ground insects.

White-winged Chough.—Fifteen of these birds have been examined; grasshoppers were found in two, and insect remains in all but one. They also feed on various weed and grass seeds, and sometimes on wheat grains.

They probably play a useful part in clearing the ground of insects, but are gravely suspected of feeding on the fruits of prickly-pear, thereby distributing the seeds further afield.

Reptiles and Frogs.

An examination of the stomach contents of three reptiles and a frog indicate that many of these are insectivorous, and play a useful part in controlling insect pests. It is hoped to examine more of these as opportunity occurs. Lizards or frogs should not be destroyed just for the mere lust of killing, unless conclusive evidence is forthcoming that they are really doing harm.

The Food of Birds from the Botanical Aspect—Seeds.*

The birds may be divided into four groups, according to the class of seeds eaten. Such a grouping is, of course, tentative, for it is apparent that in many cases the seeds eaten are dependent to a greater or less extent on the seeding plants present. For example, it is noticed that in some cases the seed of *Geijera* is the only seed found, while in other cases, other seeds of plants like those of saltbushes and even weeds are eaten in addition. It may have been that *Geijera* was the only plant growing in that locality containing seed in abundance, or perhaps the other plants present were not in their seeding stages. The same remarks may apply to legumes, other native shrubs and weed seeds.

It is fairly apparent that "grass-seed eaters" also eat the seeds of cereals where the latter are available, and this may be important from an economic point of view. For this reason I have included cereals among grasses.

A general broad classification may be made as follows :—

Geijera Seed Eaters.—Brush Turkey, Short-billed Tree Tit, Jardine's Caterpillar Eater, Scrub Robin, Butcher Bird, Rufous-crested Thickhead, Gilbert's Thickhead, Yellow-breasted Robin, Striped Honey-eater, Singing Honey-eater, Yellow-throated Friar Bird, Oriole, Spotted Bower Bird, Partridge Bronze-wing Pigeon, Brush Wattle Bird.

Native Legume and other Native Shrub Seed Eaters.—Bronzewing Pigeon, Brush Bronzewing Pigeon, Gong-gong Cockatoo, Pennant's Parrakeet, Starling.

Grass Seed Eaters.—Crow, Spotted Scrub Wren, Magpie Lark, Little Field Wren, Ground Thrush, Rosella, Red-backed Parrakeet, Stubble-Quail, Peaceful Dove, Dove, Spotted Babbling Thrush.

Weed Seed Eaters.—King Quail, Red-backed Quail, Wonga Wonga Pigeon, Crimson-bellied Parrakeet, Yellow-throated Scrub-wren, Chestnut-rumped Tit, White-browed Scrub-wren, Black-backed Wren, Silver-eye, Yellow-eared Honey-eater, Spiny-cheeked Honey-eater, Ground Lark, Grey Jumper, White-winged Chough, Sparrow.

* E. Breakwell, B.A., B.Sc., Agrostologist, Department of Agriculture.

Lists of Birds Feeding on Particular Foods of more or less Economic Importance.

(These lists are compiled from the results of the individual examinations detailed in the appendices of this Bulletin. Further examinations will undoubtedly add materially to these lists. Notes on a few of the more important species known to feed on pests have been added, though examinations of their stomach contents have not been made by us.)

Species of Birds Feeding on Wheat Grains and Cultivated Grains.

Stubble Quail (*Coturnix pectoralis*). Occasionally.
White Cockatoo (*Cacatua galerita*).
Rose-breated Cockatoo, Galah (*Cacatua roseicapilla*).
Chestnut-backed Babbling Thrush, Ground Thrush (*Cinclosoma castanonotum*).
Rosella (*Platycercus eximius*).
Magpie Lark (*Grallina picata*) (? under natural conditions).
Black-backed Magpie (*Gymnorhina tibicen*).
White-backed Magpie (*Gymnorhina leuconota*).
Bellbird (*Oreoica cristata*).
White-faced Tit-mouse (*Aphelocephala leucopsis*).
Crow (*Corvus coronoides*, including *Corone australis*). Occasionally.
White-winged Chough (*Corcorax melanorhampus*).
Sparrow (*Passer domesticus*).

Species of Birds Feeding on Fruits.

Painted Quail (*Turnix varia*).
Little Green Pigeon (*Lamprotreron superba*).
Pennant's Parrakeet (*Platycercus elegans*).
Silver-eye (*Zosterops cærulescens*).
Indian Dove (*Turtur ferrago*).

A number of other birds also feed on fruits, such as the Rosella (*Platycercus eximius*), which is a pest in apple orchards on the South Coast, at Mittagong and other places, Leatherheads (*Tropidorhynchus corniculatus*), Minahs (*Myzantha*), &c.

Species of Birds Feeding on Grass Seeds.

Brush Turkey (*Catheturus lathami*).
Stubble Quail (*Coturnix pectoralis*).
King Quail (*Excalfactoria australis*).
Bronzewing Pigeon (*Phaps chalcoptera*).
Painted Quail (*Turnix varia*).
Peaceful Dove (*Geopelia placida* [*tranquilla*]).
Dove (*Geopelia cuneata*).
Rosella (*Platycercus eximius*).
Pennant's Parrakeet (*Platycercus elegans*).
Red-backed Parrakeet (*Psephotus hæmatonotus*).
Pale-headed Parrakeet (*Platycercus pallidiceps*).
Spotted Babbling Thrush, Ground Thrush (*Cinclosoma punctatum*).
Chestnut-backed Babbling Thrush, Ground Thrush (*Cinclosoma castanonotum*).
Rock Warbler (*Origma rubricata*).

Little Field Wren (*Chthonicola sagittata*).
White-browed Scrub Wren (*Sericornis frontalis*).
Spotted Scrub Wren (*Sericornis maculata*).
Magpie Lark (*Grallina picata*).
Ground Lark (*Anthus australis*).
Native Singing Lark (*Mirafra horsfieldi*).
Diamond Sparrow (*Stagonopleura guttata*).
Red-browed Finch (*Ægintha temporalis*).
Grey-jumper, Happy Family (*Struthidea cinerea*).
White-winged Chough (*Corcorax melanorhampus*).
Sparrow (*Passer domesticus*).

Species of Birds Feeding on Weeds.

Stubble Quail (*Coturnix pectoralis*).
King Quail (*Excalfactoria australis*).
Red-backed Quail (*Turnix maculosa*).
Peaceful Dove (*Geopelia placida* [*tranquilla*]).
Dove (*Geopelia cuneata*).
Crested Pigeon (*Ocyphaps lophotes*).
Rosella (*Platycercus eximius*).
Crimson-bellied Parrakeet (*Psephotus hæmatorrhous*).
Little Field Wren (*Chthonicola sagittata*).
Chestnut-rumped Tit (*Acanthiza uropygialis*).
Yellow-throated Scrub Wren (*Sericornis barbara*).
White-browed Scrub Wren (*Sericornis frontalis*).
White-faced Titmouse (*Aphelocephala leucopsis*).
Silver-eye (*Zosterops cærulescens*).
Yellow-eared Honey-eater (*Ptilotis chrusotis*).
Yellow-faced Honey-eater (*Ptilotis chrysops*).
Ground Lark (*Anthus australis*).
Native Singing Lark (*Mirafra horsfieldi*).
Oriole (*Oriolus sagittarius*).
Crow (*Corvus coronoides*, including *Corone australis*). Occasionally.
Grey Jumper, Happy Family (*Struthidea cinerea*).
White-winged Chough (*Corcorax melanorhampus*).
Sparrow (*Passer domesticus*).

Species of Birds Feeding on Mice.

Black-shouldered Kite (*Elanus axillaris*).
Grasshopper Hawk (*Cerchneis cenchroides*).
Crow (*Corvus coronoides*, including *Corone australis*).

The Boobook Owl, the Spotted Owl, the Delicate (White) Owl, and the Mopoke (*Podargus*), though not included in this respect in our examinations, are well known to feed, often extensively, on mice.

Species of Birds Feeding on Small Birds, *e.g.*, Sparrows.

Goshawk (*Astur fasciatus*).
Pigeon Hawk (*Accipiter torquatus*).
Whistling Eagle (*Haliastur sphenurus*).
Brown Hawk (*Hieracidea berigora*).

Species of Birds Feeding on Bees.

Bee-eater (*Merops ornatus*).
Wood-swallow (*Artamus tenebrosus*).
Fuscous Honey-eater (*Ptilotis fusca*).
Yellow-throated Minah (*Myzantha flavigula*).

Apart from the examinations made in these investigations, at least two species of Wood Swallows (*Artamus*) are great enemies to the bee-keeper.

Species of Birds Feeding on Ants.

Painted Quail (*Turnix varia*).
Black-breasted Plover (*Zonifer tricolor*).
Lesser Golden Plover (*Charadrius dominicus*).
Black-fronted Dottrell (*Ægialitis melanops*).
Sharp-tailed Stint (*Heteropygia aurita* [*Pisobia acuminata*]).
Bee-eater (*Merops ornatus*).
Narrow-billed Bronze Cuckoo (*Chalcococcyx basalis*).
Black and White Swallow (*Cheramœca leucosternon*).
Fairy Martin (*Chelidon ariel*).
Brown Fly-catcher, Jacky Winter (*Micrœca fascinans*).
Scarlet-breasted Robin (*Petrœca leggei*).
Flame-breasted Robin (*Petrœca phœnicea*).
Rose-breasted Robin (*Petrœca rosea*).
Red-capped Robin (*Petrœca goodenovii*).
Hooded Robin (*Petrœca bicolor*).
Short-billed Tree Tit (*Smicrornis brevirostris*).
Brown Fly-eater (*Pseudogerygone fusca*).
White-shafted Fantail (*Rhipidura albiscapa*).
Wagtail (*Rhipidura tricolor*).
Spotted Babbling Thrush, Ground Thrush (*Cinclosoma punctatum*).
Chestnut-backed Babbling Thrush, Ground Thrush (*Cinclosoma castanonotum*).
Scrub Robin (*Drymaœdus brunneopygius*).
Babbler (*Pomatostomus frivolus*).
Coachwhip Bird (*Psophodes crepitans*).
White-browed Babbler (*Pomatostomus superciliosus*).
Lunulated Mountain Thrush (*Oreocichla lunulata*).
Rufous-backed Singing Lark (*Cinclorhamphus rufescens*).
White-fronted Chat (*Ephthianura albifrons*).
Barley Bird (*Cisticola exilis*).
Little Tit (*Acanthiza nana*).
Red-rumped Tit (*Acanthiza pyrrhopygia*).
Striated Tit (*Acanthiza lineata*).
Buff-rumped Tit (*Acanthiza reguloides*).
Blue Wren (*Malurus cyaneus*).
Blue Wren (*Malarus cyanochlamys*).
Wood-swallow (*Artamus tenebrosus*).
White-eyebrowed Wood Swallow (*Artamus superciliosus*).
Grey Shrike-Thrush (*Collyriocichla harmonica*).
Magpie Lark (*Grallina picata*).
Black-backed Magpie (*Gymnorhina tibicen*).
White-backed Magpie (*Gymnorhina leuconota*).

Butcher Bird (*Cracticus destructor*).
Bell-Bird (*Oreoica cristata*).
(*Kempiella kempi.*)
White-throated Thickhead (*Pachycephala pectoralis*).
Rufous-breasted Thickhead (*Pachycephala rufiventris*).
Yellow-breasted Shrike-Robin (*Eopsaltria australis*).
Black-capped Tree-runner (*Neositta pileata*).
White-throated Tree-creeper (*Climacteris picumna* [*leucophœa*]).
Brown Tree-creeper (*Climacteris scandens*).
Striated Pardalote or Diamond Bird (*Pardalotus ornatus*).
Short-billed Honey-eater (*Melithreptus brevirostris*).
Spine-billed Honey-eater (*Acanthorhynchus tenuirostris*).
White-fronted Honey-eater (*Glycyphila albifrons*).
Fuscous Honey-eater (*Ptilotis fusca*).
Yellow-eared Honey-eater (*Ptilotis chrusotis*).
Singing Honey-eater (*Ptilotis sonora*).
White-eared Honey-eater (*Ptilotis leucotis*).
Yellow-tufted Honey-eater (*Ptilotis melanops* [*auricomis*]).
Wattle-cheeked Honey-eater (*Ptilotis cratitia*).
White-plumed Honey-eater (*Ptilotis penicillata*).
New Holland Honey-eater (*Meliornis novæ-hollandiæ*).
Noisy Minah (*Myzantha garrula*).
Yellow-throated Minah (*Myzantha flavigula*).
Red-wattle Bird, Gillbird (*Anthochæra carunculata*).
Leatherhead (*Tropidorhynchus corniculatus*).
Ground Lark (*Anthus australis*).
Oriole (*Oriolus sagittarius*).
Crow (*Corvus coronoides*, including *Corone australis*).
Grey Bell Magpie (*Strepera anaphonensis*).
White-winged Chough (*Corcorax melanorhampus*).
Sparrow (*Passer domesticus*).
Starling (*Sturnus vulgaris*).

Species of Birds Feeding on White Ants.

Flame-breasted Robin (*Petrœca phœnicea*).
Red-rumped Tit (*Acanthiza pyrrhopygia*).
New Holland Honey-eater (*Meliornis novæ-hollandiæ*).
Crow (*Corvus coronoides*, including *Corone australis*).
Sparrow (*Passer domesticus*).
Starling (*Sturnus vulgaris*).

Species of Birds Feeding on Saw-flies.

Sharp-tailed Stint (*Heteropygia aurita-Pisobia acuminata*).
Fan-tailed Cuckoo (*Cacomantis flabelliformis*).
Bronze Cuckoo (*Chalcococcyx russata*).
White-throated Thickhead (*Pachycephala pectoralis*).

Species of Birds Feeding on Cicadas.

Black-cheeked Falcon (*Falco melanogenys*).
Leaden Fly-catcher (*Myiagra rubecula*).
Dollar Bird (*Eurystomus pacificus*).

Yellow-breasted Shrike Robin (*Eopsaltria australis*).
White-throated Tree-creeper (*Climacteris picumna* [*leucophæa*]).
Starling (*Sturnus vulgaris*).

It is due very largely to the Sparrow about Sydney that several species of Cicadas are almost extinct.

Species of Birds Feeding on Locusts or Grasshoppers.

Painted Quail (*Turnix varia*).
Pectoral Rail (*Hypotænidia philippinensis*).
Brown Hawk (*Hieracidea berigora*).
Grasshopper Hawk (*Cerchneis cenchroides*).
Boobook Owl (*Ninox boobook*).
Rufescent Powerful Owl (*Ninox rufa*).
Marbled Frogmouth (*Podargus marmoratus*).
Laughing Jackass (*Dacelo gigas*).
Sacred Kingfisher (*Halcyon sanctus*).
Narrow-billed Bronze Cuckoo (*Chalcococcyx basalis*).
Red-capped Robin (*Petræca goodenovii*).
Black-faced Cuckoo-shrike or Blue Jay (*Coracina robusta*).
White-shouldered Caterpillar-eater (*Lalage tricolor*).
Spotted Babbling Thrush or Ground Thrush (*Cinclosoma punctatum*).
Babbler (*Pomatostomus frivolus*).
Rufous-backed Singing Lark (*Cinclorhamphus rufescens*).
Tricoloured Chat (*Ephthianura tricolor*).
Buff-rumped Tit (*Acanthiza reguloides*).
Grey Shrike-thrush (*Collyriocichla harmonica*).
Magpie Lark (*Grallina picata*).
Black-backed Magpie (*Gymnorhina tibicen*).
White-backed Magpie (*Gymnorhina leuconota*).
Black-throated Butcher-bird (*Craticus nigrigularis*).
Butcher-bird (*Craticus destructor*).
Rufous-breasted Thickhead (*Pachycephala rufiventris*).
White-headed Tree-runner (*Neositta leucocephala*).
Singing Honey-eater (*Ptilotis sonora*).
Blue-faced Honey-eater (*Entomyza cyanotis*).
Drongo (*Chibia bracteata*).
Crow (*Corvus coronoides*, including *Corone australis*).
White-winged Chough (*Corcorax melanorhampus*).
Sparrow (*Passer domesticus*).
Starling (*Sturnus vulgaris*).

The common Straw-necked Ibis and Wood Swallows (*Artamus*), though not included in our examinations in this respect, play a most important part in controlling plagues of locusts.

A list has not been made of the very large number of birds feeding on beetles or their larvæ, with the two following exceptions, viz., wireworms and lady-birds. Such a list would comprise nearly all our insectivorous birds. Many beetles cause considerable economic loss, as, for instance, in the cases of timber-borers and pumpkin beetles.

Species of Birds Feeding on Wireworms.

Large-billed Ground Thrush (*Oreocichla macrorhyncha*).
White-fronted Chat (*Ephthianura albifrons*).
Ground Lark (*Anthus australis*).
Crow, Raven (*Corvus coronoides*, including *Corone australis*).
Starling (*Sturnus vulgaris*).

Reptiles.

Skink (*Lygosoma* (*Leiolepisma*) *entrecasteauxii*).

Species of Birds Feeding on Ladybirds.

Yellow-eared Honey-eater (*Ptilotis chrusotis*).

Species of Birds Feeding on Army Worms or Cutworms or other Moth Caterpillars, or Adult Moths, &c.

Stubble Quail (*Coturnix pectoralis*). Army worms.
Pectoral Rail (*Hypotænida philippinensis*). Cutworms and other larvæ.
Spurwing Plover (*Lobivanellus lobatus*). Cutworms and other larvæ.
Lesser Golden Plover (*Charadrius dominicus*). Moth caterpillars.
Black-fronted Dottrell (*Ægialitis melanops*). Moth caterpillars.
Sharp-tailed Stint (*Heteropygia aurita*). Moth larvæ.
Rufescent Powerful Owl (*Ninox rufa*).
Dollar Bird (*Eurystomus pacificus*). Army worm moth.
Pallid Cuckoo (*Cuculus inornatus*). Cutworm larvæ, vine-moth larvæ.
Fan-tailed Cuckoo (*Cacomantis flabelliformis*). Moth larvæ.
Square-tailed Cuckoo (*Cacomantis variolosus*). Stinging caterpillars.
Narrow-billed Bronze Cuckoo (*Chalcococcyx basalis*). Moth larvæ.
Bronze Cuckoo (*Chalcococcyx plagosus*). Larvæ of moth and stinging caterpillars.
Brown Fly-catcher, or Jacky Winter (*Micræca fascinans*). Caterpillars.
Scarlet-breasted Robin (*Petræca leggei*). Moth larvæ.
Flame-breasted Robin (*Petræca phœnicea*).
Red-capped Robin (*Petræca goodenovii*).
Restless Fly-catcher (*Sisura inquieta*).
Black-faced Cuckoo-Shrike, Blue Jay or Rain Bird (*Ccracina reluta*). Stinging caterpillars, bag moth larvæ, hawkmoth larvæ, &c.
Little Cuckoo-Shrike (*Coracina mentalis*). Moth larvæ.
White-shouldered Caterpillar-eater (*Lalage tricolor*). Cutworm larvæ.
Spotted Babbling Thrush, or Ground Thrush (*Cinclosoma punctatum*). Stinging caterpillars.
Babbler (*Pomatostomus frivolus*). Moth larvæ.
Rufous-backed Singing Lark (*Cinclorhamphus rufescens*).
Lunulated Mountain Thrush (*Oreocichla lunulata*).
White-fronted Chat (*Ephthianura albifrons*). Larvæ of cabbage moths.
Little Tit (*Acanthiza nana*).
Plain-coloured Tit (*Acanthiza inornata*).
Brown Tit (*Acanthiza pusilla*).
Brown-rumped Tit (*Acanthiza diemenensis*). Caterpillar.
Yellow-rumped Tit (*Acanthiza chrysorrhœa*). Cutworms, bag moth larvæ, cabbage moth larvæ (?).
Buff-rumped Tit (*Acanthiza reguloides*). Cutworms and other larvæ.
Red-throat (*Sericornis brunnea*). Larvæ.

White-browed Scrub Wren (*Sericornis frontalis*). Moth larvæ.
Spotted Scrub Wren (*Sericornis maculata*). Cutworms.
Blue Wren (*Malurus cyanochlamys*). Cutworms.
Wood-swallow (*Artamus tenebrosus*). Cutworms.
White-eyebrowed Wood-swallow (*Artamus superciliosus*). Moth larvæ.
Grey Shrike Thrush (*Collyriocichla harmonica*). Stinging caterpillars, hawk-moth caterpillars, &c.
Magpie Lark (*Grallina picata*). Moth larvæ.
Black-backed Magpie (*Gymnorhina tibicen*). Hawk-moth larvæ, cutworms.
Butcher Bird (*Cracticus destructor*).
Yellow-bellied Shrike Tit (*Falcunculus frontatus*).
Rufous-breasted Thickhead (*Pachycephala rufiventris*). Moth caterpillars.
Yellow-breasted Shrike Robin (*Eopsaltria australis*). Moth caterpillars.
Orange-winged Tree-runner (*Neositta chrysoptera*).
White-throated Tree-creeper (*Climacteris picumna* [*leucophæa*]).
Brown Tree-creeper (*Climacteris scandens*).
Silver-eye (*Zosterops cærulescens*). Cabbage moth larvæ.
Mistletoe Bird (*Dicæum hirundinaceum*).
Black-headed Pardalote (*Pardalotus melanocephalus*). Moth caterpillars.
Short-billed Honey-eater (*Melithreptus brevirostris*). Moth larvæ.
Striped Honey-eater (*Plectorhamphus lanceolatus*).
Warty-faced Honey-eater (*Meliphaga phrygia*).
Singing Honey-eater (*Ptilotis sonora*).
Yellow-throated Honey-eater (*Ptilotis flavicollis*).
White-cheeked Honey-eater (*Meliornis sericea*).
Noisy Minah (*Myzantha garrula*). Moth larvæ.
Yellow-throated Minah (*Myzantha flavigula*). Cutworms.
Red-wattle Bird, Gillbird (*Anthochæra carunculata*). Stinging caterpillars.
Blue-faced Honey-eater (*Entomyza cyanotis*). Moth larvæ.
Leatherhead (*Tropidorhynchus corniculatus*).
Ground Lark (*Anthus australis*). Cutworms and other larvæ.
Oriole (*Oriolus sagittarius*). Cutworms and other larvæ.
Crow (*Corvus coronoides*, including *Corone australis*). Cutworms, &c.
White-winged Chough (*Corcorax melanorhampus*). Cutworms, &c.
Sparrow (*Passer domesticus*). Cabbage moth larvæ, cutworms.
Starling (*Sturnus vulgaris*). Cutworms, &c.

Species of Birds Feeding on Flies.

Painted Quail (*Turnix varia*).
Black-fronted Dottrell (*Ægialitis melanops*).
Rosella (*Platycercus eximius*). Blow-fly larvæ (?).
Bee-eater (*Merops ornatus*).
House Swallow (*Hirundo neoxena*). House-flies.
Fairy Martin (*Chelidon ariel*).
Brown Fly-catcher, Jacky Winter (*Micræca fascinans*). Blow-flies, gnats, &c.
Flame-breasted Robin (*Petræca phœnicea*).
White-shafted Fantail (*Rhipidura albiscapa*).
Red-capped Robin (*Petræca goodenovii*). Small flies.
Wagtail (*Rhipidura tricolor*).
Leaden Fly-catcher (*Myiagra rubecula*). Syrphid and Muscid flies.
Brown Fly-eater (*Pseudogerygone fusca*). Small flies.

Restless Fly-catcher (*Sisura inquieta*). Blow-flies.
Chestnut-backed Babbling Thrush, Ground Thrush (*Cinclosoma castanonotum*).
Coachwhip bird (*Psophodes crepitans*). Fly maggots.
Tricoloured Chat (*Ephthianura tricolor*). Blow-flies.
Rock Warbler (*Origma rubricata*). Fly larvæ.
Little Tit (*Acanthiza nana*). Gnats and flies.
Brown Tit (*Acanthiza pusilla*).
Striated Tit (*Acanthiza lineata*). Flies and fly larvæ.
Chestnut-rumped Tit (*Acanthiza uropygialis*).
Yellow-rumped Tit (*Acanthiza chrysorrhoa*).
Buff-rumped Tit (*Acanthiza reguloides*).
Blue Wren (*Malurus cyanochlamys*).
Grey Shrike-Thrush (*Collyriocichla harmonica*). Pupæ of flies.
Wood-swallow (*Artamus tenebrosus*). Blow-flies.
Magpie Lark (*Grallina picata*). Small flies.
Butcher Bird (*Cracticus destructor*).
Black-backed Magpie (*Gymnorhina tibicen*). Fly larvæ.
Yellow-bellied Shrike Tit (*Falcunculus frontatus*).
White-faced Titmouse (*Aphelocephala leucopsis*). Drosophilid flies.
Silver-eye (*Zosterops cærulescens*). Small flies.
Mistletoe Bird (*Dicæum hirundinaceum*). Syrphid flies.
Striated Pardalote (*Pardalotus ornatus*).
Black-headed Pardalote (*Pardalotus melanocephalus*). Fly larvæ.
Lunulated Honey-eater (*Melithreptus atricapillus*). Small flies.
Short-billed Honey-eater (*Melithreptus brevirostris*).
Black-chinned Honey-eater (*Melithreptus gularis*).
Blood Bird (*Myzomela sanguineolenta*).
Spine-billed Honey-eater (*Acanthorhynchus tenuirostris*). House or bush flies.
Tawny-coloured Honey-eater (*Glycyphila melanops*). Small flies.
Warty-faced Honey-eater (*Meliphaga phrygia*). Fungous gnats, &c.
Brown Honey-eater (*Stigmatops ocularis*).
Fuscous Honey-eater (*Ptilotis fusca*).
Yellow-faced Honey-eater (*Ptilotis chrysops*). Mosquitoes and flies.
Yellow-tufted Honey-eater (*Ptilotis melanops* [*auricomis*]).
Crescent Honey-eater (*Meliornis pyrrhoptera*).
New Holland Honey-eater (*Meliornis novæ-hollandiæ*). Small flies and gnats.
White-cheeked Honey-eater (*Meliornis sericea*).
Noisy Minah (*Myzantha garrula*). Blow-flies.
Yellow-throated Minah (*Myzantha flavigula*). Muscid flies.
Brush-wattle Bird (*Anellobia chrysoptera* [*mellivora*]).
Blue-faced Honey-eater (*Entomyza cyanotis*).
Leatherhead (*Tropidorhynchus corniculatus*).
Crow (*Corvus coronoides*, including *Corone australis*). Blow-fly maggots occasionally.
Sparrow (*Passer domesticus*). Blow-flies.
Starling (*Sturnus vulgaris*). Drone fly, &c.

Reptiles.

Monitor, "Goanna" (*Varanus varius*). Pupæ of flies.

Species of Birds Feeding on Plant Bugs.

Stubble Quail (*Coturnix pectoralis*). Rutherglen bug.
Dollar Bird (*Eurystomus pacificus*).
Fan-tailed Cuckoo (*Cacomantis flabelliformis*).
Fairy Martin (*Chelidon ariel*).
Brown Fly-eater (*Pseudogerygone fusca*).
White-shafted Fantail (*Rhipidura albiscapa*).
Coachwhip Bird (*Psophodes crepitans*).
Wagtail (*Rhipidura tricolor* [*motacilloides*]).
White-browed Babbler (*Pomastostomus superciliosus*).
Rufous-backed Singing Lark (*Cinclorhamphus rufescens*).
Lunulated Mountain Thrush (*Oreocichla lunulata*).
Little Tit (*Acanthiza nana*).
Plain-coloured Tit (*Acanthiza inornata*).
Striated Tit (*Acanthiza lineata*).
Yellow-rumped Tit (*Acanthiza chrysorrhoa*).
Blue Wren (*Malurus cyanochlamys*).
Wood-swallow (*Artamus tenebrosus*).
Butcher Bird (*Cracticus destructor*).
Rufous-breasted Thickhead (*Pachycephala rufiventris*).
Silver-eye (*Zosterops cærulescens*).
Spotted Pardalote (*Pardalotus punctatus*).
Short-billed Honey-eater (*Melithreptus brevirostris*).
Warty-faced Honey-eater (*Meliphaga phrygia*).
White-plumed Honey-eater (*Ptilotis penicillata*).
White-cheeked Honey-eater (*Meliornis sericea*).
Noisy Minah (*Myzantha garrula*).
Ground Lark (*Anthus australis*).
Crow (*Corvus coronoides*, including *Corone australis*). Occasionally.

Species of Birds Feeding on Froghoppers or Leafhoppers.

Red-rumped Ground Wren (*Hylacola cauta*).
Yellow-breasted Shrike Robin (*Eopsaltria australis*).
Rufous-breasted Thickhead (*Pachycephala rufiventris*).
White-headed Tree-runner (*Neositta leucocephala*).
Black-capped Tree-runner (*Neositta pileata*).
Silver-eye (*Zosterops cærulescens*).
Short-billed Honey-eater (*Melithreptus brevirostris*).
White-eared Honey-eater (*Ptilotis leucotis*).

Species of Birds Feeding on Thrips.

Chestnut-rumped Tit (*Acanthiza uropygialis*).
Silver-eye (*Zosterops cærulescens*).
Spotted Pardalote (*Pardalotus punctatus*).
Lunulated Honey-eater (*Melithreptus atricapillus*).

Species of Birds Feeding on Aphides.

Brown Fly-eater (*Pseudogerygone fusca*).
Striated Tit (*Acanthiza lineata*).
Yellow-rumped Tit (*Acanthiza chrysorrhoa*).
Silver-eye (*Zosterops cærulescens*).

Mistletoe Bird (*Dicæum hirundinaceum*).
Spotted Pardalote (*Pardalotus punctatus*) (?).
Lunulated Honey-eater (*Melithreptus atricapillus*).
Blood Bird (*Myzomela sanguineolenta*).
Yellow-tufted Honey-eater (*Ptilotis melanops* [*auricomis*]).
Sparrow (*Passer domesticus*).

The Blue Wren (*Malurus cyanoclamys*) is known to feed on aphides in gardens.

Species of Birds Feeding on Scales.

Little Tit (*Acanthiza nana*).
Buff-rumped Tit (*Acanthiza reguloides*).
Black-backed Magpie (*Gymnorhina tibicen*) (?).
Silver-eye (*Zosterops cærulescens*).
Striated Pardalote (*Pardalotus ornatus*).
Spotted Pardalote (*Pardalotus punctatus*).
Black-headed Pardalote (*Pardalotus melanocephalus*) (?).
Blue-faced Honey-eater (*Entomyza cyanotis*).
Ground Lark (*Anthus australis*) (?).
Starling (*Sturnus vulgaris*) (?).

Species of Birds Feeding on Psyllids.

Little Tit (*Acanthiza nana*).
Brown Tit (*Acanthiza pusilla*).
Striated Tit (*Acanthiza lineata*).
Chestnut-rumped Tit (*Acanthiza uropygialis*).
Yellow-rumped Tit (*Acanthiza chrysorrhoa*).
Buff-rumped Tit (*Acanthiza reguloides*).
Silver-eye (*Zosterops cærulescens*).
Striated Pardalote (*Pardalotus ornatus*).
Spotted Pardalote (*Pardalotus punctatus*).
Short-billed Honey-eater (*Melithreptus brevirostris*).
Red-wattle Bird, Gillbird (*Anthochæra carunculata*).
Starling (*Sturnus vulgaris*).

APPENDICES.

INTRODUCTORY NOTE TO APPENDICES I AND II.

J. B. CLELAND, M.B., Principal Microbiologist, Department of Public Health.

The following list comprises complete details of an examination of the contents of stomachs and crops of Australian birds conducted over a series of years for the purpose of ascertaining their feeding habits and their value or otherwise to the community. After the scientific name, and the popular name, the locality, accompanied by the date, is given, each bird examined being treated individually. The first detail given is the rough field classification of the contents by which they are drafted, according to their nature, to the botanist, the entomologist, &c., for further identification. The value of inserting this provisional classification chiefly lies in the misinterpretations that may be made by the ornithologist in the field when examining the contents of the stomachs of the birds he has shot, and shows how this must often be qualified by a later examination made by a specialist. Unless such later examinations are made by those specially skilled in the subject dealt with, erroneous conclusions may sometimes be drawn from observations made in the field.

As regards the identification of the birds, in most cases I am responsible for these, but when in doubt have submitted specimens for further identification to the late Mr. A. J. North, of the Australian Museum, to Mr. Gregory M. Mathews, or to Mr. Lancelot Harrison. During the later examinations Dr. Ferguson has been associated with me in identifying the birds, and drafting their stomach contents, and is also responsible for certain of the insect identifications. The majority of the entomological identifications have been made by Mr. W. W. Froggatt, Government Entomologist, assisted by Mr. W. B. Gurney, Assistant Entomologist. The examination of seeds and vegetable matter has been conducted by Mr. J. H. Maiden, Government Botanist, with the assistance of Mr. Ewen McKinnon, Mr. W. M. Carne, Mr. A. A. Hamilton, and Mr. E. Breakwell. We are also indebted to other specialists, more particularly Mr. Charles Hedley, Assistant Curator of the Australian Museum, and Mr. A. R. McCulloch, of the Australian Museum, for special identifications.

Whilst the majority of the birds have been collected by myself, chiefly in New South Wales, but also in South Australia, Western Australia, Tasmania, and its dependent islands, we are indebted for a very considerable number to Dr. T. L. Bancroft, of Eidsvold, Queensland, and to Dr. MacGillivray, of Broken Hill, both of whom have supplied specimens of Queensland birds. Mr. T. McCarthy, assistant to Entomologist, Department of Agriculture, has also collected and examined birds for us. In

addition, we are indebted to the following pastoralists of New South Wales, who, in response to an appeal by the Blow-fly Investigation Committee and the Pastoralists' Association, have kindly forwarded us a number of highly important specimens of birds:—Mr. W. R. Wood, "Yerinan," Coonabarabran; Mr. D. McIntyre, "Goolhi," Gunnedah; Mr. Samuel Berry, "Warrabah," Upper Manilla; Mr. I. P. Kelman, "Tantaranna," Moree; Mr. W. G. Lachszyrma, Charlton Station, Tarcoon; Mr. G. C. Wood, "Moorawari," Tarcoon; Mr. Thomas Perkins, Bogamildi Station, Gil Gil, Moree; Mr. Craig, Cooma; Mr. R. Leslie, "Gingie," Walgett; Mr. J. M. Atkinson, of the Pastoralists' Sheep Fly Committee, kindly forwarded a number of specimens from the Nyngan District; Mr. G. M. McKeown, of the Wagga Experiment Farm, obtained for us a most valuable series of starlings, for which we are much indebted.

"M," followed by a numeral, indicates the number of the bird in Mathews' "Hand-list of the Birds of Australasia," published as a supplement to *The Emu,* Vol. 7, 1907-8. This hand-list has been adhered to in preference to Mr. Mathews' later list, inasmuch as a considerable number of the results had already been tabulated in this form, and his lists at present available have not yet reached finality of nomenclature.

"H," followed by a numeral, indicates the number of the bird in Robert Hall's "A Key to the Birds of Australia and Tasmania," 1st edition.

The initials "E.W.F." indicate that the following memorandum is the result of the examination made by Dr. E. W. Ferguson.

The initials "W.W.F." indicate that the following memorandum is the result of the examination of the insect remains by Mr. Froggatt, and "W.B.G." those by Mr. Gurney; similarly the initials "J.H.M.," "E.M.," "W.M.C." indicate the botanical results of an examination by Mr. Maiden, Mr. Mackinnon, or Mr. Carne.

The date when shot is preceded by the locality. When more than one specimen of a species has been examined, these are denoted by (a), (b), &c.

All the results contained in this table are not here published for the first time. In 1910, in *The Emu,* Vol. 9, April, page 219, and in the *Agricultural Gazette of New South Wales* for May, 1910, results were published of examinations of the stomach contents of fifty-seven birds, and these are included here. In the second report of the Government Bureau of Microbiology for the years 1910 and 1911, page 192, the results of the examinations of 243 more birds as well as of the fifty-seven mentioned above are given. This was supplemented by the results of another 100 birds published in the third report of the Government Bureau of Microbiology, 1912, page 181. It has been considered advisable to include these previous lists in the present one, so that, with the list prepared by Mr. Musson, details of the examinations of the stomach contents of 1,000 birds can be dealt with together.

APPENDIX I.

Tabulated Examination of the Contents of Stomachs and Crops of each Species of Australian Birds, &c., examined.

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
1. *Catheturus lathami*.....	Brush Turkey	1	Queensland	.....	None	Seeds of *Geijera* (a small shrub); grass seeds.	This bird may destroy land snails in the scrubs and, being a scratching bird, some ground insects.
2. *Coturnix pectoralis*	Stubble Quail	10	Richmond	.....	Beetles (1); army worms (2); Rutherglen bug and insect fragments (1).	35 wheat grains (1); others show grass seeds; *Solanum nigrum* (2); *Portulacca* (1); buttercups (1); chickweed (1).	A game bird.
3. *Excalfactoria australis* ...	King Quail	3	Richmond	.....	None	Grass seeds (3); and *Polygonum aviculare* (1).	A game bird.
4. *Turnix varia*	Painted Quail	2	Richmond	.....	Orthoptera (1); ants (1); beetles (2); flies (1).	Grass seeds, legume seeds, buds and leaves, wild fruit.	A game bird of very slight if any insectivorous value.
5 *Turnix maculosa*	Red-backed Quail ...	3	Claudie River, N.Q....	Sept. (1) Oct. (2)	Fragments of insects (1)	Seeds of legumes (2); dock (1); and wire weed (1).	
6. *Lamprotreron superba*.....	Little Green Pigeon...	1	Richmond	.....	None	Wild fruit	
7. *Geopelia humeralis*	Barred-shoulder Dove	1	Gular	Oct.	None	Seeds	
8. *Geopelia placida* (*tranquilla*).	Peaceful Dove	7	Sydney (1); Richmond (2); Gular (1); Mannum, S.A. (2); Eidsvold, Q. (1).	Oct. (1) Nov. (3)	None	*Casuarina glauca* (1); *Euphorbia peplus* (1); nettle seeds (2); wire weed (1); *Stellaria media* (2); Cyperaceous seeds (1); *Amaranthus* seeds (1); grass seeds (2); ink weed (1); *Chenopodium* seeds (1).	Seed and fruit eaters.
9. *Geopelia cuneata*.....	Dove	4	Richmond	.....	None	Numerous grass seeds (4); *Portulacca* seeds (3); fat hen seeds (2); chickweed and trefoil (1).	
10. *Phaps chalcoptera*	Bronzewing Pigeon ...	2	Sydney (1); Blanchetown, S.A. (1).	May (1) ... . Dec. (1)	None	Seeds of cassia (1); seeds of saltbushes (1).	Seed eaters; game birds.
11. *Phaps elegans*	Brush Bronzewing ...	1	Richmond	.....	None	Grass, wattle, and other legume seeds.	
12. *Geophaps scripta*	Partridge Bronzewing Pigeon.	1	Queensland	.....	None	Wilga (*Geijera*) seeds	

13. *Ocyphaps lophotes*	Crested Pigeon	2	Rowena	Nov. (2)	None	Small seeds, some of trefoil	Seed eaters; game birds.
14. *Leucosarcia picata*	Wonga Wonga Pigeon	1	Hawkesbury River	Nov.	Small land snails	Various seeds, including native cherry, blueberry, and seeds of a cyperaceous plant; a large quantity of rubiaceous seeds, &c.	
15. *Hypotænidia philippinensis.*	Pectoral Rail	2	Richmond		Spider (1); locust or grasshopper (1); several beetles (*Dytiscus* and scarabs); cutworm larvæ and some pink larvæ (1).		Of slight insectivorous value in spite of its varied diet, as it lives round swamps.
16. *Porphyrio melanonotus*	Red-bill	1	Richmond		None	Fragments of vegetable matter.	A game bird.
17. *Fulica australis*	Coot	1	Richmond		None	Water plants	Of no value.
18. *Podiceps gularis*	Grebe	2	Richmond		Fresh-water mussel (1); water beetles (considerable quantity) (1); water bugs (considerable quantity) (1).	Seeds of a water grass (1)	Insectivorous to some extent, but not of much economic value.
19. *Lobivanellus lobatus*	Spurwing Plover	1	Upper Manilla	Sept.	Portions of beetles, including weevils and cutworms.	None	Both game birds; destroy insects on the plains and round watercourses.
20. *Zonifer tricolor*	Black-breasted Plover	2	Adelaide, S.A.	May	Cricket (1); numerous beetle fragments (2); many ants (2); grub (1); &c.	Leaves of clover (1); and small seeds (1).	
21. *Charadrius dominicus*	Lesser Golden Plover	3	Botany Bay (1); Richmond (2).	Mar. (1)	Molluscs (3); beetle remains (3); ants (1); moth caterpillar (1).	Portions of leaves (2)	A game bird.
22. *Ægialitis ruficapilla*	Red-capped Dottrell	1	Perth, W.A.	Sept.	Fragments of insects, including beetles.		
23. *Ægialitis melanops (nigrifrons).*	Black-fronted Dottrell	4	Port Adelaide (2); Richmond (2).	May (2)	Molluscs (1); beetles (4); moth caterpillars (2); flies (1); ants (1).	Seeds (1)	Feeds at the water's edge—not of much economic value.
24. *Himantopus leucocephalus*	White-headed Stilt	2	Tailem Bend, S.A. (1); Richmond (1).	May (1)	Freshwater shells (1); dragon-fly larvæ (1); water beetles (1).		Though to a great extent insectivorous, the insects destroyed are chiefly useful ones.
25. *Totanus stagnatilis*	Green Shank	1	Richmond		Dragon-fly larvæ		
26. *Heteropygia aurita (Pisolia acuminata).*	Sharp-tailed Stint	4	Gular (3); Richmond (1)	Oct. (3)	Saw-flies (1); beetles (3); moth larvæ (2); ants (1).	A number of seeds (1); *Confervæ* (1).	Insectivorous in part.
27. *Rynchœa australis*	Painted Snipe	1	Richmond		Fresh-water shells	Leaves, &c.	A game bird.
28. *Ibis molucca*	White Ibis	1	Queensland		Crustaceans		One of the most valuable insectivorous birds following the locust and cutworm plagues.
29. *Herodias timoriensis*	White Egret	2	Queensland (1); Richmond (1).		Cricket (1); shrimps (1); frogs (1).		
30. *Notophoyx novæ-hollandiæ*	White-fronted Heron	1	Hawkesbury River	August	Crabs and prawns		

APPENDIX I—*continued.*

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
31. *Butorides stagnatilis*	Thick-billed Bittern..	1	Hawkesbury River ...	.....	Small fish; shrimps	.....	From an economic standpoint a pest, destroying many young fish.
32. *Botaurus poeciloptilus*	Bittern	1	Richmond	.....	Weevils.....	Leaves and fruits	
33. *Biziura lobata*	Musk Duck	1	Hawkesbury River ...	.....	Mud crabs.....	.....	Of no commercial value.
34. *Phalacrocorax carbo*	Black Cormorant.....	1	Hawkesbury River ...	April	Catfish; dead shells	.....	A pest, destroying many young fish.
35. *Astur fasciatus*	Goshawk	1	Near Adelaide, S.A...	May	Small bird	.....	All hawks have an insectivorous value, but it is largely discounted by the fact that they all destroy better insectivorous birds.
36. *Accipiter torquatus*	Pigeon Hawk	2	Richmond	.....	Sparrows (1); pigeon (1)	.....	
37. *Haliastur sphenurus*	Whistling Eagle	2	Adelaide, S.A. (1); Tarcoon (1).	May, Oct.	Small bird (1); wool fibres (1).	.....	Destroys grasshoppers, and is an omnivorous eater.
38. *Elanus axillaris*	Black-shouldered Kite	5	Richmond	.....	Mice (5); lizard (1)	.....	Useful in catching mice, but of little insectivorous value.
39. *Falco melanogenys*	Black-checked Falcon	1	Richmond	.....	Cicadas	.....	
40. *Hieracidea berigora*.....	Brown Hawk.....	2	Flinders Is. (1); Richmond (1).	Nov. (1)...	Sparrow (1); locusts or grasshoppers, 3 species (1); beetles (2), including several scarabs (1).	.....	To a certain extent insectivorous, but also bird-killers.
41. *Cerchneis cenchroides*	Grasshopper Hawk ...	2	Richmond	.....	Mice (1); large quantity of locusts or grasshoppers (1).	.....	
42. *Ninox boobook*	Boobook Owl	2	Mannum, S.A. (1); Richmond (1).	Nov. (1) ...	Beetles (2); grasshoppers (1).	.....	Of some value.
43. *Ninox maculata*.....	Spotted Owl	1	Richmond	.....	Beetles.....	.....	
44. *Ninox rufa*.....	Rufescent Powerful Owl.	1	Claudie River, N.Q...	Sept.	Large phasmids and grasshoppers.	.....	Feeding at night, it is more the night-moving Orthoptera they capture.
45. *Geoffroyus McLennani* ...	McLennan's Parrot ...	7	North Queensland	July (3). Aug. (2) Sept. (2)	.....	Seeds in all; those of *Rosa rubiginosa* identified in (1.)	
46. *Electus macgillivrayi*.....	Macgillivray's Parrot	2	North Queensland	Sept.	.....	Various seeds	
47. *Trichoglossus swainsoni*...	Blue Mountain Lorikeet.	1	Richmond	.....	.....	Seeds.....	Of no economic value.
48. *Glossopsittacus porphyrocephalus*.	Purple-crowned Lorikeet.	1	Mt. Lofty Range, S.A.	May	.....	Honey, with stamens of Eucalyptus.	
49. *Callocephalon galeatum* ...	Gang-gang Cockatoo..	2	Richmond	.....	.....	Wattle and eucalyptus seeds.	

50. *Cacatua galerita*	White Cockatoo	3	Nowra	April		Sorghum and other seeds	A great pest to farmers, doing much damage to wheat.
51. *Cacatua roseicapilla*	Rose-breasted Cockatoo (Galah).	5	Yanco (4); Belaringar (1).	April (1) Dec. (4)		Wheat grains (1), and other seeds (4).	
52. *Platycercus elegans*	Pennant's Parrakeet	7	Hawkesbury R. (1); Wagga (2); Mt. Kosciusko (1); Mt. Irvine (1); Richmond (2).	June (1) July (2) Dec. (1)	A number of larvæ of some beetle (1).	Geebung fruits (1); cultivated olives (2); Eucalyptus seeds, also some other seeds (1); 15 c.c. of seeds, mainly of grass, with a few legume and tiltree seeds ? (1); a large quantity of apparently ti-tree seed (1).	Of no economic value.
53. *Platycercus adelaidæ*	Adelaide Parrakeet	1	Mt. Lofty Range, S.A.	May		Seeds	
54. *Platycercus flaveolus*	Yellow-rumped Parrakeet.	3	Morgan, S.A.	Nov.		Seeds (3)	
55. *Platycercus flaviventris*	Yellow-bellied Parrakeet.	2	Flinders Is., Bass Straits.	Nov.	Larvæ of insects ? (1)	Seeds (1)	
56. *Platycercus pallidiceps*	Pale-headed Parrakeet	1	Queensland			Grass seeds	
57. *Platycercus eximius*	Rosella	11	Wagga (1); Gunnedah (1); Belaringar (1); Uralla (1); Richmond (7).	Feb. (1) May (2) July (1)	Lamellicorn beetle (1); pupa cases of flies ?, possibly blow-flies (1); flies (1).	Shepherd's purse seeds (1); *Amaranthus* seeds (1); maize seeds (2); grass seeds (2); other seeds (several).	A pest in apple orchards, on the South Coast in particular.
58. *Barnardius barnardi*	Barnard's Parrakeet	2	Willbriggie (1); Morgan, S.A. (1).	Oct. (1) Nov. (1)		Seeds (2)	Of no economic value.
59. *Psephotus hæmatorrhous*	Crimson-bellied Parrakeet.	3	Dubbo (1); Moree (1); Belaringar (1).	May (1) Sept. (1) Oct. (1)		*Amaranthus* and saltbush seeds (1); other seeds in (3).	
60. *Psephotus hæmatonotus*	Red-backed Parrakeet	3	Orange (2); Mannum, S.A. (1).	July (2) Nov. (1)		Grass seeds (1); unidentifiable seeds in the others.	Sometimes a pest in wheat fields when numerous.
61. *Melopsittacus undulatus*	Budgerygar	1	Richmond			Seeds of wild plants.	Of no economic value.
62. *Podargus strigoides*	Tawny Frogmouth (morepork).	2	Milson Is., Hawkesbury R. (1); Richmond (1).	March (1)	2 centipedes, spider, snail, and a quantity of scarab beetles (1); fragments of longicorn beetle (1).		Night hunters—insectivorous.
63. *Podargus marmoratus*	Marbled Frogmouth	1	Pascoe River, N.Q.	August	Longicorn beetle and grasshopper.		
64. *Eurystomus pacificus*	Dollar Bird	4	Hawkesbury R. (1); Richmond (3).	Feb. (1)	Chiefly rose chafers, with a cicada and beetles (1); beetles and army worm moth and plant bug (1); ant, cockchafer, plant bugs and cicada (1); Hymenoptera, cockchafers and plant bugs (1).		Useful insectivorous birds.

APPENDIX I—*continued.*

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
65. *Dacelo gigas*.....	Laughing Jackass.....	3	Thredbo River (1); Richmond (2).	Dec. (1) ...	Lamellicorn beetles and beetle larvæ (1); three centipedes, a spider, grasshopper, &c.. weevils and scarabs (1): cockchafer larvæ (1).	.....	
66. *Halcyon pyrrhopygius*	Red-backed Kingfisher	1	Morgan, S.A.	Nov.....	Remains of lizard, spider, crustacean and beetles.	.....	Useful insectivorous birds.
67. *Halcyon sanctus*	Sacred Kingfisher.....	4	Bathurst (1); Canowindra (1); Richmond (2).	Jan. (1) Feb. (1)	Fresh-water crayfish (1); spider (1); beetle remains (2); locust or grasshopper (1).	.....	
68. *Merops ornatus*	Bee-eater.....	13	Queensland (3); Richmond (8); Coonabarabran (1); Morgan, S.A. (1).	Sept. (1) Nov. (1)	Bees (5); dragon flies (1); ant-lion (1): moths (3); beetles (several); occasionally ants, crickets, froghoppers, flies, butterflies, &c.	.....	A very useful insectivorous bird, but in bee-keeping districts is a pest and is often therefore shot.
69. *Caprimulgus macrurus* ...	Large-tailed Nightjar.	1	Claudie River, N.Q....	Oct.....	Beetle remains	.....	A night hunter; a useful insectivorous bird.
70. *Salangana (Callocalia) francica.*	Grey-rumped Swiftlet	1	Claudie River, N.Q....	Sept.	Beetles, small bees and crickets.	.....	A useful insectivorous bird.
71. *Cuculus inornatus*.....	Pallid Cuckoo.....	10	Upper Manilla (1); Richmond (9).	Sept. (1)	Millipede (1); cockroach (1); beetle (1); larvæ of moths (9), including 35 cutworm larvæ and one vine moth larva in (1), cutworm larvæ in another, and 10 larvæ of stinging cup moth in another, with a few of these larvæ in still another.	.....	All the cuckoos are useful insect destroyers.
72. *Cacomantis flabelliformis*	Fan-tailed Cuckoo.....	8	Flinders Is. (2); Ourimbah (1); Berry (1); Richmond (4).	Aug. (1) Nov. (3)	Saw-fly larvæ (2); beetle larvæ (2); moth larvæ (6); plant bugs (1); small hymenoptera (1).	.....	
73. *Cacomantis variolosus*.....	Square-tailed Cuckoo.	1	Richmond	.....	Stinging larvæ of *Doratifera.*	.....	
74. *Chalcococcyx basalis*	Narrow-billed Bronze Cuckoo.	3	Overland Corner, S.A. (1); Richmond (2).	Dec. (1) ...	Moth larvæ (2); beetles, bugs, grasshoppers and ants (1).	.....	

75. *Chalcococcyx plagosus*	Bronze Cuckoo.....	6	Perth, W.A. (1); Queensland (1); Richmond (4).	Sept. (1)	Larvæ of moths in all; larvæ of stinging caterpillars, *Doratifera* (2); larvæ of stinging caterpillar, *Teara* (1).	.....	Among the most useful birds in orchards and vineyards, eating, among other things, vine moth larvæ.
76. *Chalcococcyx russata*	.....	1	Claudie River, N.Q.	Oct.	Larvæ of saw-fly (?).....	.....	
77. *Hirundo neoxena*	House Swallow.....	2	Cronulla (1); Richmond (1).	Mar. (1) ..	House flies (1); beetle remains (1).	.....	
78. *Cheramœca leucosternon* ..	Black and white Swallow.	2	Narrabri	Jan.	Beetles and wasps (2), and ants (1).	.....	
79. *Chelidon ariel*.....	Fairy Martin.....	4	Gular (1); Richmond (1); Morgan, S.A. (2).	Oct. (1) ...	Ants (1); other Hymenoptera (2); beetles (4); plant bugs (1); flies (2).	.....	Useful insectivorous birds, destroying (among other things) mosquitoes on the wing.
80. *Microœca fascinans*.....	Brown Fly-catcher (Jacky Winter).	13	Queensland (6); Sydney (2); Cronulla (1); Bowral (1); Richmond (2); Blanchetown, S.A. (1).	Mar. (1) April (1) Nov. (2)	Ant remains and beetle remains in most; sometimes caterpillars spiders, gnats, blowflies, &c.	.....	
81. *Petrœca leggii*.....	Scarlet-breasted Robin	2	Adelaide (1); Richmond (1).	May (1)....	Ants (2); moth larvæ (2); beetle (1).	Seeds (1)	
82. *Petrœca phœnicea*	Flame-breasted Robin	5	Bowral (1); Mt. Kosciusko (1); Flinders Is. (1); Adelaide, S.A. (2).	April (1) May (2) Nov. (1) Dec. (1)	Beetles (4); white ants (1); ants (1); flies (1); moths (1).	.....	All the robins are valuable insectivorous birds, eating chiefly the smaller soft-bodied flies, gnats, small moths, &c.
83. *Petrœca rosea*	Rose-breasted Robin	3	Hawkesbury R. (2); Richmond (1).	June (2)...	Beetles (3); ants (2); spider (1).	.....	
84. *Petrœca goodenovii*.....	Red-capped Robin ...	3	Dubbo (1); Tailem Bend, S.A. (1); Adelaide, S.A. (1).	May (2) Sept. (1)	Ants (2); beetles (2); moths (1); grasshoppers (1); small flies (1).	.....	
85. *Petrœca bicolor*	Hooded Robin	1	Port Adelaide	May	Spiders, ants, cricket, beetles.	.....	
86. *Smicrornis brevirostris* ...	Short-billed Tree-tit	10	Eidsvold, Q. (2); Hawkesbury R. (1); Cobar (1); Richmond (1); Tailem Bend, S.A. (2); Murray Flats, S.A. (1); Morgan, S.A. (2).	May (2)] July (1) Sept. (1) Nov. (2)	Large quantity of ants (1); insect remains, mostly beetles, in all.	*Geijera* seeds (1)	Insectivorous.
87. *Gerygone albigularis*	White-throated Fly-eater.	1	Molong	.....	Beetles and insect remains.	.....	All the fly-catchers are valuable insect eaters.
88. *Pseudogerygone magnirostris.*	Large-billed Fly-eater	1	Claudie River, N.Q....	Oct.....	Beetle and weevil	.....	
89. *Pseudogerygone fusca*.....	Brown Fly-eater.....	5	Berry (1); Lisarow (1); Richmond (3).	May (1),... July (1)	Aphides (1); plant bugs (1); ants (2); weevils (2); wattle beetle larvæ (1); small Diptera (1).	.....	
90. *Rhipidura albiscapa*	White-shafted Fantail.	6	Queensland (1); Hawkesbury R. (1); Richmond (4).	Aug. (1)....	Ants (5); flies (4); native bees (1); beetles (4); plant bugs (1).	.....	

APPENDIX I—*continued.*

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
91. *Rhipidura isura*	.....	2	Claudie River, N.Q....	Sept.	Beetle (1); Hymenoptera (1).	.....	All the fly-catchers are valuable insect eaters.
92. *Rhipidura tricolor* (*motacilloides*).	Wagtail	7	Queensland (2); Sydney (3); Richmond (2).	April (1) June (1) Nov. (1)	Beetles (4); ants (1); asilid flies (1); other Diptera (4); plant bug (1); Neuroptera (1).	.....	
93. *Myiagra rubecula*.....	Leaden Fly-catcher...	4	Hawkesbury River...	Oct. (1) ... Nov. (1) Dec. (1)	Flies in several; cicadas (2); froghoppers (1); muscid flies (2); syrphid flies (1); native bee (1).	Vegetable capsule with seeds (1).	
94. *Myiagra nitida*.....	Satin Fly-catcher.....	1	Mt. Kosciusko	Dec.	Beetles.....	.....	
95 *Sisura inquieta*.....	Restless Fly-catcher...	3	Canowindra (2); Tailem Bend, S.A. (1).	Feb. (2) May (1)	Blow-flies of two species (2); moths and spiders (1); beetle remains (1).	.....	
96. *Monarcha melanopsis*.....	Black-faced Fly-catcher.	1	Ourimbah.....	Nov.....	Fragments of Hymenoptera and beetles.	.....	
97. *Coracina robusta* (*Graucalus melanops*).	Black-faced Cuckoo-Shrike (Blue Jay).	13	Berry (1); Hawkesbury R. (1); Tarcoon (2); Upper Manilla (1); Richmond (7); Coonalpyn, S.A. (1).	Aug. (1)... Sept. (1) Oct. (3)	Spiders and Neuroptera (1); locusts or grasshoppers (4); larvæ of stinging caterpillar (*Doratifera*) (2); bagworm larvæ (1); hawk-moth larva (?) (1); other moth larvæ (5); wasps (3); cockchafers or other beetles (9).	Seed-pod of a native pea (?) (1); native cherry and small seeds (1).	All the shrikes are among our useful insectivorous birds.
98. *Coracina parvirostris*.....	Small-billed Cuckoo-Shrike.	1	Flinders Is., Bass Straits.	Nov.....	Beetles.....	.....	
99. *Coracina mentalis*	Little Cuckoo-Shrike..	4	Eidsvold, Q. (1); Coonabarabran (1); Richmond (2).	Sept. (1) ..	Bugs (1); moth larvæ (1); beetles in all.	Seeds in (1)	
100. *Coracina lineata*.....	Barred Cuckoo-Shrike	1	Pascoe River, N.Q.....	July	.....	Figs.....	
101. *Edoliisoma tenuirostre*	Jardine's Caterpillar-eater.	1	Queensland	.....	Tree cricket (?)	*Geijera* seeds.....	
102. *Lalage tricolor*.....	White-shouldered Caterpillar-eater.	5	Milson Is. (1); Richmond (4).	Oct. (1) ...	Insect remains and moth (1); locusts or caterpillars (4); ichneumon wasp (1); beetle (1); cutworms (4).	Seeds of a heath (1).....	Useful insectivorous birds.

103. *Cinclosoma punctatum* ...	Spotted Babbling Thrush (Ground Thrush).	4	Sydney (1); Richmond (3).	Oct. (1) ...	Locust or grasshopper (1); ant (1); beetles (3); stinging caterpillars (1).	Native currant seeds and native grass seeds (1); wattle and other legume seeds (1); clover and other seeds (1).	May be taken as useful insectivorous birds.
104. *Cinclosoma bastanonotum*	Chestnut-backed Babbling Thrush (Ground Thrush).	4	Alawoona, S.A. (3); South Australia (1)	Dec. (3) ...	Ants (1); fly (1); beetles (2).	Wheat grains (1); rush seeds (1); *Geijera* seeds (1); grass seeds (1); other seeds (2).	
105. *Drymaedus brunneopygius.*	Scrub Robin.....	4	Alawoona, S.A. (1); Coonalpyn, S.A. (1); Murray Flats, S.A. (1).	Dec. (1) ...	Ants (4); beetles (3) ...	*Geijera* seeds (1); minute seeds (1).	
106. *Hylacola cauta*	Red-rumped Ground Wren.	1	Coonalpyn, S.A.	.....	Beetles and leaf hoppers.	.....	
107. *Psophodes crepitans*	Coachwhip Bird	4	Bulli (1); Hawkesbury R. (2); Middle Harbour (1).	April (2) Nov. (2)	Spiders (1); ants (3); dung beetles (1); fly maggots (1); plant bug (1); other beetles (2).	Fragments of vegetable matter and seeds (3).	
108. *Pomatostomus frivolus* ...	Babbler	7	Rowena (2); Canowindra (3); Gunnedah (1); Eidsvold, Q. (1).	Feb. (1) Nov. (2)	Ant-lion larva (1); ants (1); moth larvæ (2); locust (1); beetle remains (7).	....	
109. *Pomastostomus superciliosus.*	White-browed Babbler	3	Tailem Bend, S.A. (2); Hallet's Cove, S.A. (1).	May (3) ...	Cockroaches (2); ants (1); plant bugs (2); mole cricket (1); beetles in all.	.....	
110. *Cinclorhamphus rufescens*	Rufous-backed Singing Lark.	2	Richmond	.....	Spiders (2); locust or grasshopper (1); ants (1); beetles (2); plant bugs (1); moths (1).	.....	
111. *Oreocichla lunulata*	Lunulated Mountain Thrush.	2	Bulli (1); Richmond (1).	April (1)...	Ground beetles (1); ants (1); other beetles (1); moths (1); plant bugs (1).	Buds or leaves (1)	
112. *Oreocichla macrorhyncha*..	Large-billed Ground Thrush.	1	Mt. Arthur, Tas.	Nov.	Wire-worm and other beetle larvæ and beetles.	.....	
113. *Ephthianura albifrons* ...	White-fronted Chat...	5	Canowindra (2); Richmond (3).	Feb. (2) ...	Larvæ of cabbage moths (2); larva of cockchafer and wire-worms (1); ants (2); spiders (1); chalcid wasps (1).	Seeds (2)	
114. *Ephthianura tricolor*	Tricoloured Chat	5	Molong (3); Coolabah (2).	Oct. (3) ...	Bugs (3); beetles (2); locusts or grasshoppers (2); butterfly larvæ (2); blow-flies (2).	.....	
115. *Cisticola exilis*	Barley Bird	1	Richmond	.....	Spiders, ants, beetles and moths.	.....	
116 *Megalurus galactotes*	Tawny Grass-bird	1	Claude River' N.Q....	Oct.	Bugs	.....	

APPENDIX I—*continued.*

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
117. *Origma rubricata*	Rock Warbler	4	Hawkesbury R. (3); Middle Harbour (1).	June (2) Nov. (1)	Insect remains, chiefly beetles (2); fly larvæ (1).	Seeds in all, including saltbush seeds (1); grass seeds (1).	
118. *Chthonicola sagittata*	Little Field Wren.....	2	Queensland (1); Picton (1).	June (1)	Weevil (1)	Seeds of grasses (2); rushes (1); *Oxalis* (1); *Lonitium* (1).	
119. *Acanthiza nana*	Little Tit	7	Sydney (1); Hawkesbury R. (1); Picton (2); Dubbo (1); Richmond (2).	Mar. (1) April (1) June (2) Oct. (1)	Ants (2); beetles (6); gnats (1); moths (1); flies (1); plant bugs (1); psyllids and scale (1).	.....	May be taken as useful insectivorous birds.
120. *Acanthiza inornata*	Plain-coloured Tit ...	1	Sydney	.....	Weevil, plant bug, moths, beetles, and Hymenoptera.	....	
121. *Acanthiza pusilla*	Brown Tit.....	5	Hawkesbury R. (1); Sydney (1); Kurrajong Heights (1); Biblienluke (1); Richmond (1).	April (2)...	Insect remains, including beetles (5); lace-wings or other Neuroptera (2); chalcid wasps (1); moth larvæ (2); flies (2); psyllid (1); bugs (1).	....	
122. *Acanthiza diemenensis* ...	Brown-rumped Tit ...	2	Flinders Is. (1); Mt. Arthur, Tas. (1).	Nov.	Beetles (2); caterpillar (1).	.....	
123. *Acanthiza pyrrhopygia* ...	Red-rumped Tit	5	Willbriggie (1); Monarto South, S.A. (1); Tailem Bend, S.A. (1); Coonalpyn, S.A. (2).	May (1) July (1) Oct. (1)	White ants (1); small Hymenoptera (1); ants (1); beetles (5).	.....	
124. *Acanthiza lineata*	Striated Tit	9	Sydney (4); Looksley (1); Mt. Irvine (1); Uralla (1); Richmond (1); Adelaide (1).	Feb. (1) May (1) June (2) Aug. (1) Oct. (2)	Spiders (2); lace-wing's eggs (1); weevils (2); fly larvæ (1); psyllids and aphides (1); flies (4); other beetles (7); bugs (1); plant bugs (1); Hymenoptera (1); Neuroptera (1); ants (1); caterpillar (1).	.....	All these birds are of insectivorous value, though more in the forests and on waste lands than in orchards and on farms.
125. *Acanthiza uropygialis* ...	Chestnut-rumped Tit	9	Cobar (2); Dubbo (2); Coolabah (1); Overland Corner, S.A. (2); Mannum, S.A. (1); Murray Flats, S.A. (1).	Sept. (4) Nov. (1) Dec. (2)	Psyllid and thrips (1); beetles (6); Hymenoptera (3); bugs (2); flies (1).	Nettle seeds (1); saltbush seeds (2).	

126. *Acanthiza chrysorrhoa* ...	Yellow-rumped Tit ...	7	Berry (1); Picton (1); Richmond (5).	June (1) Aug. (1)	Spiders (2); stinging Hymenoptera (1); parasitic Hymenoptera (1); carabs and weevils (1); other beetles (5); cutworms and bag-moth larvæ (1); cabbage moth larvæ (?) (1); moth larvæ (4); flies (3); plant bugs (2); aphides (2); psyllid (2).	.....	All these birds are of insectivorous value, though more in the forests and on waste lands than in orchards and on farms.
127. *Acanthiza reguloides*	Buff-rumped Tit	9	Locksley (1); Dubbo (1); Picton (2); Sydney (1); Bowral (1); Gosford (1); Richmond (2).	Feb. (1) April (2) May (1) June (2) Sept. (1)	Psyllid (1); scale (1); flies (2); ants (3); cutworm (1); moths or moth larvæ (2); grasshopper (1); beetles (6); spider (1).	.....	
128. *Sericornis brunnea*.....	Red-throat	1	Queensland	.....	Larvæ of moth, and beetle remains.	.....	
129. *Sericornis barbara*	Yellow-throated Scrub Wren.	1	Mt. Irvine	June	.....	Seeds of ink weed and fat-hen, and some other seeds.	
130. *Sericornis flindersi*	.....	1	Flinders Is., Bass Straits.	Nov.	Beetles, including tiger beetle and weevil.	Seeds of native heath	
131. *Sericornis frontalis*.....	White-browed Scrub Wren.	5	Sydney (2); Lisarow (2); Mt. Irvine (1).	April (1) May (2) June (2)	Portions of insects (4); including moth larvæ (1); May-fly (1); capsule of cockroach (1); beetle remains (2); book scorpion (1); spider (?) (1).	Grass seeds (4); seeds of sour sorrel (1); geranium (1); *Siegesbeckia orientalis*, L. (2); legume seeds (2); compositous seeds (1).	
132. *Sericornis maculata*	Spotted Scrub Wren..	1	Port Adelaide, S.A. ...	May	Cutworms; small shells	Grass seeds	Many of the wrens go in flocks and are great destroyers of aphides and small moths on garden plants.
133. *Malurus cyaneus*	Blue Wren.....	1	Flinders Is., Bass Straits.	Nov.	Spiders, ant, weevil and other beetles.	.....	
134. *Malurus cyanochlamys* ...	Blue Wren	7	Sydney (1); Ourimbah (1); Richmond (1); Orange (2); Port Adelaide, S.A. (2).	May (2) July (2) Nov. (2)	Cutworms (1); flies (2); ants (3); plant bugs (1); beetle remains (5).	Seeds of native raspberry (1).	
135. *Malurus melanotus*	Black-backed Wren ..	2	Overland Corner, S.A (2).	Dec. (2)...	Weevils (2); bugs (1) ...	*Chenopodium* sp. (1)	
136. *Malurus lamberti*	Variegated Wren	1	Hawkesbury River ...	Oct.	Beetles.....	.....	
137. *Malurus assimilis*	.....	2	Alawoona, S.A.	Dec.	Insect remains (2), including beetles (1).	.....	
138. *Stipiturus malachurus* ...	Emu Wren.....	3	Sydney (3)	April (2) Oct. (1)	Insects (3); including mantis (1); lamellicorn and Heteromera beetles (1); Homoptera (2).	.....	

APPENDIX I—*continued.*

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
139. *Artamus melanops*	Black-faced Wood-Swallow.	1	Gunnedah	Sept.	Beetles and bugs	.....	Very valuable, as they go in large flocks and destroy grasshoppers when in the hopping stage.
140. *Artamus tenebrosus*	Wood-Swallow	14	Narrabeen (1); Hawkesbury R. (1); Cobar (2); Upper Manilla (1); Bibbenluke (1); Canowindra (1); Coonabarabran (1); Richmond (4); Eidsvold, Q. (1); Mannum, S.A. (1).	Feb. (1) Mar. (1) Sept. (4) Oct. (1) Nov. (1)	Wasps or bees (12); ants (5); blow-flies (2); other flies (4); cutworms (2); plant bugs (3); water beetle (1); beetles (5).	Rush seeds (1)	
141. *Artamus superciliosus*	White-eyebrowed Wood-Swallow.	1	Richmond	.....	Ants, beetles, six moth larvæ.	.....	
142. *Collyriocichla harmonica*	Grey Shrike-Thrush...	9	Sydney (1); Hawkesbury R. (1); Richmond (5); Coonabarabran (1); Uralla (1).	June (2) Sept. (1) Oct. (1)	Spiders (2); ants (2), numerous (1); beetles (7), including weevils, scarabs and longicorns in several; butterfly (*Danais*) (1); banksia moth (*Danima*) (1); stinging caterpillars (*Doratifera*) (2); caterpillars of hawk-moth (1); other moth caterpillars in several; grasshoppers (2); pupæ of flies (?) (1).	Seeds (1)	Useful insectivorous birds.
143. *Collyriocichla superciliosa*	Shrike Thrush	5	Pascoe R., N.Q. (1); Claudie R., N.Q. (4).	Aug. (1) Sept. (2) Oct. (2)	Insect remains in all; including weevils (2); and other beetles (3); bugs (1).	Seeds (?) (2).....	
144. *Grallina picata*	Magpie Lark.....	9	Sydney (1); Rowena (1); Canowindra (2); Richmond (3); Eidsvold, Q. (1); Queensland (1).	Feb. (2) June (1) Nov. (1)	Ants (3); mole cricket (1); plague locusts (1); grasshopper (1); beetles in several, including scarabs, cockchafers' larvæ, weevils, &c.; moth larvæ (1); small flies (1); spiders (1).	Maize seed (2); wheat (2); grass seeds (2).	Among our most useful insectivorous brids.

145. *Gymnorhina tibicen*	Black-backed Magpie	9	Berry (2); Sydney (1); Bowral (1); Hawkesbury R. (1); Upper Manilla (1); Walgett (1); Tarcoon (1); Richmond (1).	Mar. (1) April (1) May (1) Aug. (2) Sept. (2) Oct. (1)	Ants (4); locusts or grasshoppers (3); fly larvæ (1); weevils or other beetles (7); 8 hawk moth larvæ (1); cutworm (1); red scale (?) (1); spider (1).	Wheat and plant remains (1); wild fig (1).	Among our most useful insectivorous birds.
146. *Gymnorhina leuconota*	White-backed Magpie	2	Uralla	May	Chiefly beetles, including weevils, scarabs, &c. (2); ants (2); locusts (1).	Wheat grains (2), numerous in (1).	
147. *Cracticus nigrigularis*	Black-throated Butcher-Bird.	1	Uralla	May	Grasshoppers	.....	
148. *Cracticus destructor*.....	Butcher Bird.....	9	Eidsvold, Q. (3); Hawkesbury R. (1); Tarcoon (1); Richmond (4).	June (1) Oct. (1)	Grasshoppers or other Orthoptera (4); cockroach (1); brown moth (1); other moths (1); flies (1); plant bugs (1); beetles (7); ants (3), in (1) 99 per cent. soldier ants; stinging Hymenoptera (1); spiders (?).	*Geijera* seeds (1); wild seeds (1).	Destroy insects, but their value is much discounted because they kill so many valuable small birds.
149. *Falcunculus frontatus*.....	Yellow-bellied Shrike-Tit.	2	Tamworth (1); Richmond (1).	Oct. (1) ...	Longicorn and chrysomelid beetles (1); beetles, moths and flies (1).	.....	
150. *Oreoica cristata*.....	Bell Bird.....	1	Coonalpyn, S.A.	.....	Ants, small beetles	Grains of wheat	
151. *Lempiella lempi*.....	.....	2	Claudie River, N.Q...	Oct.....	Beetles (2); ants (1)	.....	
152. *Pachycephala pectoralis* ...	White-throated Thickhead.	7	Hawkesbury R. (4); Uralla (2); Hallet's Cove, S.A. (1).	May (3) June (1) Aug. (3)	Saw-fly larvæ (1); ants (3); cockroach egg capsules (2); earwig (1); beetles (2); weevil (1); egg of phasmid (1); spider (1).	Small seeds (1)	Useful insectivorous birds in the bush and scrubs.
153. *Pachycephala rufiventris*	Rufous-breasted Thickhead.	12	Hawkesbury R. (3); Richmond (3); Tamworth (1); Ourimbah (1); Willbriggie (1); Queensland (2); Eidsvold, Q. (1).	Jan. (1) Oct. (3) Nov. (2)	Spiders (1); ants (3); grasshoppers (2); moth caterpillars (4); plant bugs (2); froghoppers (1); weevils or other beetles (7); stinging Hymenoptera (1).	*Geijera* seeds (1)	
154. *Pachycephala gilberti*.....	Gilbert's Thickhead...	1	Murray Flats, S.A. ...	.....	.....	*Geijera* seeds.....	
155. *Eopsaltria australis*.	Yellow-breasted Shrike Robin.	6	Sydney (3); Hawkesbury R. (1); Molong (1); Richmond (1).	May (1) Aug. (1)	Ants (4); moth caterpillar (1); cicada (1); beetles (4).	Seeds of a heath (1)	Usefulinsectivorous birds. The yellow robins are among our most useful destroyers of small moths and other insects on the foliage.
156. *Eopsaltria chrysorrhoa* ...	Yellow-breastedRobin	1	Queensland	.....	Spiders; a few beetles ..	*Geijera seeds*.....	

APPENDIX I—*continued.*

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
157. *Aphelocephala leucopsis*...	White-faced Titmouse	9	Gular (2); Narrabri (1); Willbriggie (1); Belaringar (1); Hallett's Cove, S.A. (1); Murray Flats, S.A. (2); Mannum, S.A. (1).	Jan. (1) Mar. (1) May (1) Oct. (3) Nov. (1)	Fragments of insects (6); beetles (2); drosophilid flies (1).	Seeds in all, including wheat grains (2); thistle seeds (1).	A useful insectivorous bird.
158. *Neositta chrysoptera*.....	Orange-winged Tree-runner.	6	Hawkesbury R. (1); Gunnedah (1); Richmond (4).	Feb. (1) June (1)	Spiders (2); beetles (6); moth larvæ (5).	.....	The members of both these genera confine the greater part of their attention to the insects found upon gum and other forest trees. Much of their food is found under or on dry bark on the trees.
159. *Neositta leucocephala*	White-headed Tree-runner.	1	Eldsvold, Q.	.....	Grasshoppers, froghoppers, beetles.	.....	
160. *Neositta pileata*	Black-capped Tree-runner.	2	Murray Flats, S.A. (2)	.....	Froghoppers or leafhoppers (2); click beetles and other beetles (2); ants (1).	.....	
161. *Climacteris picumna (leucophæa).*	White-throated Tree creeper.	11	Narrabeen (1); Bowral (1); Tent Hill (1); Molong (1); Narrabri (1); Richmond (4); Mount Lofty, S.A. (1); Murray Flats, S.A. (1).	Jan. (1) Mar. (1) April (1) May (1) Dec. (1)	Ants (9); beetles (6); cicada (1); small moths (1).	.....	
162. *Climacteris scandens*	Brown Tree-creeper...	9	Locksley (1); Canowindra (2); Richmond (4); Eldsvold, Q. (1); Morgan, S.A. (1).	Feb. (3) Nov. (1)	Spider (1); ants (9); beetles (6); wasp (1); moths (2).	.....	
163. *Zosterops gouldi*	Green-backed Silver-eye.	1	Perth, W.A.	Sept.	Beetle and other insect remains.	.....	The silver-eyes are useful in the winter time, but when in flocks in summer discount their usefulness by doing much damage to soft fruits, figs, grapes and persimmons.
164. *Zosterops cærulescens*.....	Silver-eye	53	Richmond (23); Sydney (24); Mt. Irvine (1); Ourimbah (1); Queensland (1); Flinders Is. (1); Mt. Lofty, S.A. (2).	Feb. (1) April (2) May (2) June (10) July (3) Aug. (5) Oct. (1) Nov. (4)	Spiders (6); moth larvæ (16), including cabbage-moth (1); passion vine froghopper (1); *Psylla* (1); thrips (1); aphids (2), including aphids from sorghum (1); small flies (4); black scale (1); plant bugs (1); mites (1); fragments of insects altogether in (32).	Fruit, probably figs (7); fruit flesh (13); blackberries (1); heath-flowers (43); ink berries (4); *Solanum nigrum* (1); native cherry (1); geebung fruits (3); pepper-tree berries (3); native raspberry (1); 44 altogether contained vegetable food, chiefly fruits.	

165. *Dicæum hirundinaceum*...	Mistletoe Bird	2	Hawkesbury R. (1); Richmond (1).	Mar. (1)...	Spiders (2); moths (1); syrphid flies (1); aphides (1).	Mistletoe fruit (1)	Insectivorous, but not numerous enough to do much in keeping down insects.
166. *Pardalotus ornatus (striatus).*	Striated Pardalote ...	5	Richmond (3); Morgan, S.A. (1); Alawoona, S.A. (1).	Nov. (1) Dec. (1)	Ants (2); flies (3). scale (1); scale from eucalyptus (1); psyllids (2); beetles (3).	.....	*Diamond Birds.*—Most of their food is obtained among the foliage and flowers of eucalyptus and other forest trees. From an economic point of view they are not likely to destroy many injurious insects that affect the farmer or gardener.
167. *Pardalotus affinis*	Yellow-tipped Pardalote.	2	Flinders Is.	Nov.	Beetles (2)	.....	
168. *Pardalotus punctatus* ...	Spotted Pardalote ...	9	Hawkesbury R. (3); Gular (1); Jindabyne (1); Richmond (2); Eidsvold, Q. (1); Queensland (1).	Mar. (1) June (2) Oct. (1) Dec. (1)	Beetles (6); wasp (1); plant bugs (2); thrips (1); aphides (?) (2); lerp scale (?) (1); scale from eucalyptus (1); about 150 dirty white scale insects (1); psyllid (1).	.....	
169. *Pardalotus xanthopygius*..	Yellow-rumped Pardalote.	1	Mannum, S.A.	Nov.	Insect remains, including beetles.		
170. *Pardalotus melanocephalus.*	Black-headed Pardalote.	8	Eidsvold, Q. (8)	.....	Spiders (1); beetles (8); fly larvæ (1); moth caterpillars (2); lerp scales (?) (2).	.....	
171. *Melithreptus atricapillus*	Lunulated Honey-eater	5	Sydney (3); Hawkesbury R. (2).	June (1) July (2) Nov. (1)	Beetles (4); thrips (3); small flies (1); aphis (1).	.....	
172. *Melithreptus gularis*	Black-chinned Honey-eater.	1	Queensland	.....	Beetle and fly remains...	.....	
173. *Melithreptus brevirostris.*	Short-billed Honey-eater.	12	Sydney (4); Hawkesbury R. (1); Richmond, (3); Coonalpyn, S.A. (1); Mannum, S.A. (2).	Mar. (1) April (1) June (1) May (1) Aug. (1) Oct. (1) Nov. (2)	Spiders (6); beetles or their larvæ (9); weevils (1); moth larvæ (7); froghoppers (1); fly-maggots or flies (2); *Psyllidæ* (1); ants (2); plant bugs (2).		The honey-eaters find most of their food in the honey of our bush flowers. They have very small stomachs and, except in a few cases, insects are merely incidental. Some of them help to fertilise flowers while collecting the honey. Some do a little damage to soft fruits.
174. *Melithreptus affinis*.....	.....	1	Flinders Island	Nov.	Beetles	.....	
175. *Plectorhamphus lanceolatus.*	Striped Honey-eater..	3	Coolabah (1); Queensland (2).	.....	Green bug (1); caterpillar (1).	Wilga (*Geijera*) seeds (2)	
176. *Myzomela sanguineolenta.*	Blood Bird.....	2	Richmond	.....	Flies (2), and other insect remains; aphides (1).	.....	
177. *Myzomela nigra*	Black Honey-eater ...	1	Molong	.....	Beetles and Hymenoptera.	.....	
178. *Acanthorhynchus tenuirostris.*	Spine-billed Honey-eater.	6	Sydney (1); Hawkesbury R. (2); Richmond (2); Mt. Lofty, S.A. (1).	May (2) Oct. (1) Dec. (1)	Ants (1); flower wasps (1); dung beetles (1) and beetle remains (2); house or bush flies (1); flies (2).	.....	
179. *Glycyphila melanops*	Tawny-coloured Honey-eater.	2	Sydney (2)	April (1) Sept. (1)	Wasps (2); small flies (1).	.....	

APPENDIX I—*continued.*

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
180. *Glycyphila albifrons*.....	White-fronted Honey-eater.	2	Overland Corner, S.A.	Dec.	Ants (1); beetles (1); bugs (2).	.....	The honey-eaters find most of their food in the honey of our bush flowers. They have very small stomachs and, except in a few cases, insects are merely incidental. Some of them help to fertilise flowers while collecting the honey. Some do a little damage to soft fruits.
181. *Meliphaga phrygia*.....	Warty-faced Honey-eater.	4	Hawkesbury R. (1); Richmond (3).	April (1)...	Wasps (2); beetles (3); moths (1); bee-fly (1); fungous gnats (1); other flies (1); plant bugs (2).	Pollen grains (1)	
182. *Stigmatops ocularis*.....	Brown Honey-eater ..	1	Perth, W.A.	Sept.	Flies, beetles and Homoptera.	.....	
183. *Ptilotis fusca*	Fuscous Honey-eater	19	Wellington (2); Molong (1); Richmond (5); Queensland (10); Murray Flats, S.A. (1).	Nov. (2)...	Spiders (1); ants (10); wasp family (1); bees (1); flies (6); Neuroptera (1); beetles (16).	.....	
184. *Ptilotis chrysotis*.....	Yellow-eared Honey-eater.	6	Sydney (1); Hawkesbury R. (4); Ourimbah (1).	April (1) June (1) Nov. (1) Dec. (2)	Spiders (1); ants (1); ladybird (1); other beetles (2); insect fragments (3).	Native raspberry (1); ink plant (1); *Solanum nigrum* (1); *Elæocarpus* (blueberry) (1); trefoil (?) (1); *Stephania* seeds (1); vegetable matter (6).	
185. *Ptilotis sonora*	Singing Honey-eater...	4	Cobar (1); Tailem Bend, S.A. (1); Mannum, S.A. (1); Murray Flats, S.A. (1).	May (2) Sept. (1) Nov. (1)	Ants (1); grasshopper (1); beetles and Hymenoptera (1); moths (1); insects (3).	Saltbush seeds (1); native cherry seeds (1); wilga (*Geijera*) seeds (1); vegetable matter in all.	
186. *Ptilotis chrysops*	Yellow-faced Honey eater.	8	Sydney (3); Hawkesbury (3); Kurrajong Heights (1); Richmond (1).	April (2) May (1) June (1) July (1) Nov. (1)	Beetles (5); mosquitoes (1); flies (2); Hymenoptera (1); insects (6).	Cape gooseberry, ink berry, and other seeds (1).	
187. *Ptilotis flavicollis*	Yellow-throated Honey-eater.	2	Flinders Is.	Nov.	Spiders (1); *Paropsis* beetles (1); moth pupa (1).	Seeds of native heath (1)...	
188. *Ptilotis leucotis*	White-eared honey-eater.	4	Sydney (1); Hawkesbury R. (3).	Mar. (1) June (2) Oct. (1)	Native bee (1); beetles (4); froghopper (1); ants (1).	.....	
189. *Ptilotis melanops* (*auricomis*).	Yellow-tufted Honey eater.	7	Sydney (1); Hawkesbury R. (1); Molong (1); Richmond (2).	April (2) Aug. (1)	Ants (2); other Hymenoptera (2); beetles (3); flies (1); aphides (1).	.....	
190. *Ptilotis cratitia*	Wattle-cheeked Honey-eater.	1	Coonalpyn, S.A.	.....	Mostly ants.....	.....	

191. *Ptilotis ornata*.....	Yellow-plumed Honey-eater.	4	Mannum, S.A. (1); Blanchetown, S.A. (1); Alawoona, S.A. (1); Monarto South, S.A. (1).	July (1) Nov. (2) Dec. (1)	Insect fragments in all; weevils or other beetles (3); Hymenoptera (1).	.....	The honey-eaters find most of their food in the honey of our bush flowers. They have very small stomachs and, except in a few cases, insects are merely incidental. Some of them help to fertilise flowers while collecting the honey. Some do a little damage to soft fruits.
192. *Ptilotis plumula*	Yellow-fronted (plumed) Honey-eater.	1	Perth, W.A.	Sept.	Spider and beetle	.....	
193. *Ptilotis penicillata*.....	White-plumed Honey-eater.	8	Orange (1); Canowindra (2); Richmond (1); Murray Flats, S.A. (1); Morgan, S.A. (2); Overland Corner, S.A. (1).	Feb. (2) July (1) Nov. (2) Dec (1)	Ants (3); other Hymenoptera (3); plant bugs (2); beetles (4).	.....	
194. *Meliornis pyrrhoptera*	Crescent Honey-eater	4	Flinders Is. (1); Mt. Lofty, S.A. (3).	May (2) Nov. (1	Insect fragments in all; flies (1); beetles (2).	.....	
195. *Meliornis novæ-hollandiæ*	New Holland Honey-eater	11	Sydney (7); Hawkesbury R. (1); Mt. Lofty, S.A. (1); Coonalpyn, S.A. (2).	April (2 May (1) July (1) Aug. (4) Nov. (1)	Ichneumon wasps (1); white ants (1); ants (1); Hymenoptera (2); flies and gnats, mostly small (8); beetles (3).	.....	
196. *Meliornis sericea*.....	White-cheeked Honey-eater.	4	Sydney (3); Richmond (1).	Mar. (1) April (1) July (1).	Stinging Hymenoptera (1); flower beetles (1); plant bugs (1); flies (3); moths (1).	.....	
197. *Myzantha garrula*	Noisy Minah.....	27	Hawkesbury R. (2); Richmond (7); Gunnedah (4); Orange (1); Canowindra (2); Uralla (3); Upper Manilla (1); Belaringar (3); Eldsvold, Q. (3); Swan Reach, S.A. (1).	Feb. (1) April (2) May (5) July (1) Sept. (5) Nov. (1)	Spiders (2); ants (13); parasitic wasps (1); *Bembex* wasps (1); beetles (21); moth larvæ (3); plant bugs (2).	Seeds (2); fig (?) (1).....	These are omnivorous feeders; though honey-eaters, they catch blow-flies about the camp and eat maggots crawling out of dead carcases. In fruit-growing districts they are a pest on grapes and soft fruits.
198. *Myzantha flavigula*	Yellow-throated Minah.	4	Moree (1); Tarcoon (1); Belaringar (2).	April (1) May (1) Oct. (3)	40 ants, 80 Ichneumon flies and 1 bee, and 8 muscid flies (1); cutworms (1); crane fly (1); beetles (4).	Small seeds (2)	
199. *Anthochæra carunculata*	Red-wattle Bird (Gillbird).	5	Jindabyne (1); Richmond (4).	Dec. (1) ...	Ants (3); braconid wasps (1); other Hymenoptera (1); beetles (2); stinging caterpillar (1); psyllids (2).	.....	
200. *Anellobia chrysoptera* (*mellivora*).	Brush-wattle Bird.....	2	Sydney (1); Richmond (1).	Mar. (1) ...	Spiders (2); Hymenoptera (1); beetles (2); flies (1).	Wilga and *Chenopodium* seeds (1).	
201. *Acanthogenys rufigularis*	Spiny-cheeked Honey-eater.	3	Cobar (1); Coolabah (1); Overland Corner, S.A. (1).	Sept. (1) Dec. (1)	Hymenoptera (?) (2); beetles (1).	Native cherry seeds (1); other seeds (1).	

APPENDIX I—*continued.*

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
202. *Entomyza cyanotis*	Blue-faced Honey-eater.	3	Coolabah (1); Queensland (1); Mannum, S.A. (1).	Nov. (1) ...	Small lizard (?) (1); beetles (2); grasshopper (1); moth larvæ (1); flies (1); green bug (1); white scale (1).	.....	
203. *Tropidorhynchus corniculatus.*	Leatherhead	5	Hawkesbury R. (2); Richmond (2); Gular (1).	April (1) May (1) Oct. (1)	Ants (2); beetles (3); moths (1); earwig (1); grasshopper (?), fly (1).	Seeds (2)	A pest in orchard districts and does a lot of damage.
204. *Philemon citreogularis*	Yellow-throated Friar-bird.	1	Eidsvold, Q.	.....	Ground beetles.....	Wilga (*Geijera*) seeds.....	
205. *Anthus australis*	Ground Lark.....	7	Bathurst (1); Mt. Kosciusko (1); Richmond (5).	Jan. (1), Dec. (1)	Spiders (3); ants (4); wire-worms (2); other beetles (6); cutworms (2); other moth larvæ (2); plant bugs (1); scale insect (?) (1).	Summer grass seeds (1); 50 seeds of *Polygonum aviculare* and a few other seeds (1); grass seed (1).	Small insects on grass lands—probably destroys many destructive insects in the early stage of their growth.
206. *Mirafra horsfieldi*	Native Singing Lark	1	Richmond	.....	.....	Grass and *Polygonum* (wire weed) seeds.	Eats some insects.
207. *Staganopleura guttata*	Diamond Sparrow.....	1	Richmond	.....	.....	*Paspalum* seed	
208. *Ægintha temporalis*	Red-browed Finch.....	11	Middle Harbour (2); Narrabeen (1); Berry (4); Gosford (4)	Mar. (1), April (2) May (4), Aug. (4)	.....	Seeds in all, mostly seeds of grasses, especially summer grass; geranium seeds (1).	Of no insectivorous value, as they eat seeds only.
209. *Oriolus sagittarius (viridis).*	Oriole	11	Hawkesbury R. (1); Berry (1); Richmond (4); Eidsvold, Q. (5).	April (1) Aug (1)	Cutworm (1); other caterpillars (2); ant (1); beetle remains (1).	Chiefly fruits or seeds, including native cherry (?) (1); white cedar fruits (3); wilga (*Geijera*) seeds (3); amaranthus seeds (1); fig (1); camphor laurel (2).	Eats chiefly fruits and berries, but varies its diet.
210. *Sphecotheres maxillaris* ...	Fig Bird	1	Queensland	.....	.....	8 fruits of white cedar	
211. *Chibia bracteata*.....	Drongo	2	Eidsvold, Q. (1)	.....	Grasshopper (1); longicorn and other beetles (1); paper-nest wasp (1).	.....	In flocks the Drongo shrikes probably destroy a lot of forest insects.
212. *Ælurædus maculosus*.....	Spotted Cat-bird.....	1	Pascoe River, N.Q.....	Aug.	.....	Seeds of *Sideroxylon*.....	Fruit and seed eater.
213. *Chlamydodera maculata*...	Spotted Bower-bird...	5	Queensland (5)	.....	Fragments of insects (2)	Fruits or seeds in all, including white cedar berries (4); and *Geijera* seeds (1).	When near a garden or orchard they often damage fruit.

214. *Craspedophora alberti*	Albert Rifle-bird	3	Claudie R., N.Q. (3)...	Oct. (3) ...	Beetle remains (1)	Large seeds (3).....	
215. *Corvus coronoides*, including *Corone australis*.	Crow, Raven.....	38	Jindabyne (2); Rowena (1); Upper Manilla (1); Moree (2); Merah North (2); Yanco (1); Walgett (2); Tarcoon (2); Coonabarabran (1); Belaringar (4); Richmond (18); Pascoe River, N.Q. (2).	Mar. (1) June (3) Aug. (2) Sept. (4) Oct. (6), Nov. (1) Dec. (2)	Mice (3); fresh-water shell (1); crustacean (?) (1); spiders (2); centipede (2); ants (3); grasshoppers (6); white ants (1); mantis (1); Hymenopetra (4); chicken (?) (1); egg shell (1); beetles (14); wire-worm (1); Lepidopterous larvæ (4); cutworms (1); blowfly maggots (*C. rufifacies*) (1); pupa of blowfly (*Calliphora*) (1); tipuid (1); fly larvæ (1); plant bug (1); remains of carrion in several (such as sheep wool, horsehair. &c.).	Vegetable fragments in several, including burrs (2); wheat and oat grains (1); wheat grains (2); saltbush seeds (1); pod of cress (1); grass and oat seeds (1); maize and wheat and field peas (1); peas (1); maize (1); grass leaves (several).	Probably one of the most valuable insectivorous birds in our western country, and a scavenger. In spite of the damage it does, it is a very important factor in the destruction of maggots in carrion.
216. *Strepera graculina*.....	Mountain Magpie	2	Richmond	.....	.....	Native grape and mistletoe fruits, orchid flowers, buds, &c. (1); green leaves and tree twigs (1).	A pest in orchards on the coast.
217. *Strepera versicolor*	Grey Crow-Shrike	1	Mt. Kosclusko	Dec.	Golden stag beetles	.....	
218. *Strepera anaphonensis*.....	Grey Bell Magpie	1	Richmond	.....	Ants; stinging Hymenoptera; beetles.	.....	
219. *Struthidea cinerea*	Grey Jumper (Happy Family).	12	Gunnedah (6); Coonabarabran (1); Belaringar (1); Eidsvold, Q (4).	April (1) Sept. (4)	Insect fragments (7).....	Seeds in all but one, including grass seeds *Panicum* and *Setaria* (4); wheat and *Panicum* seeds (2); wheat (1); *Setaria* seeds (1); buffalo grass seeds (1); rush seeds (2); Hesham Scent (1); *Chenopodium* seeds (3); wild melon seeds (1); dock (1).	These birds are omnivorous about a camp, and will eat anything, but in the bush they destroy large numbers of ground insects.
220. *Corcorax melanorhampus*	White-winged Chough	15	Hawkesbury R. (1); Berry (1); Belaringar (6); Gunnedah (3); Coonabarabran (1); Tarcoon (1); Queensland (1).	April (1) May (6) Sept. (4) Oct. (1)	Spiders (1); grasshopper (2); ants (2); beetles (13); cutworms (1); moth (1); insect remains in all but one.	Seeds of red-ink plant (1); grass seeds (*Setaria*) (1); *Gahnia* seeds (1); grass or cyperaceous seeds (1); saltbush (1); wheat grains (5); seeds present in 11 out of 15.	These are also forest birds that feed upon the ground, turning over dead sticks and bark hunting for food.

APPENDIX 1—*continued.*

Scientific Name.	Popular Name.	No. examined.	Locality.	Months.	Animal Food.	Vegetable Food.	Remarks.
Introduced Birds.							
221. *Turtur ferrago*	Indian Dove	1	Richmond	.....	.....	Figs	Not to be encouraged in large numbers; may become a pest.
222. *Passer domesticus*	Sparrow	127	Adelaide (2); Richmond (125).	May (2)....	White ants (1); moths (1); cabbage moth larvæ (1); cutworms (1); locusts (21) (part of a flock feeding); ants (several); beetles (several); 2 blow-flies, *Calliphora oceaniæ* (1); aphides (several) (seen feeding on rose aphides).	Wheat and maize (64); in one bird 400 millet seeds, a little maize, 40 summer grass seeds, 14 cat's ear seeds, and some wire-weed seeds; grass and weed seeds (a number).	A pest anywhere, in spite of the fact that it eats many insects.
223. *Sturnus vulgaris*	Starling	73	Berry (1); Wagga (26); Cooma (2); Uralla (16); Canowindra (1); Gunnedah (5); Richmond (22).	Feb. (11) Mar. (5) May (2) Aug. (22) Sept. (9)	Fresh-water shell (1); egg-shells (1); spiders (11); millipedes (4); earwig (1); locust or grasshoppers (5); mole-cricket (1); cricket (1); ants (6); wire-worms (2); other beetles (57); cut-worms (34); other moth larvæ (7); moths (3); silver-fish (1); bugs (7); flies (4), including the rat-tailed larvæ of *Eristalis tenax* in (2); red scale (?) (1); psyllid (1); cicada (1); white ants (?) (1).	*Polygonum* and grass seeds (1); ground fungus, *Clavaria* (1); lucerne (1); fruit (1); buds and leaves (several); wild seeds (6); green clover (1); wheat grains (3).	Discount all the value they do in destroying insects by the damage they do to crops and orchards. They drive many of our more useful birds out of the district they occupy.
224. *Fringella chloris*	Greenfinch	1	Narrabeen	Mar.	.....	Seeds	A seed eater; finches spread pest weeds by dropping the seeds under the trees.

Reptiles.

225. *Amphibolurus barbatus* ...	Frill Lizard	1	Emmaville	.....	Hairy grubs, beetles, part of a centipede.	*Lobelia* flower	All of considerable value in destroying insects, and should be protected.
226. *Varanus varius*	Monitor (" Goanna ")	1	Dubbo	Sept.	Rabbits' hair, cockroaches, pupæ of flies.	.....	
227. *Lygosoma (Leiolepisma) entrecasteauxii.*	Skink	1	Flinders Is.	Nov.....	Spiders, wireworm, moth pupa.	.....	

Amphibians.

228. *Hyla ewingii*.....	Frog	1	Flinders Is.	Nov.....	Beetles.....	.....	All of considerable value in destroying insects, and should be protected.

APPENDIX II.

Tabulated Examination of the Contents of Stomachs and Crops of the individual Australian Birds, &c., examined.

Catheturus lathami. (M. 7; H. 567.) Yellow-wattled Brush Turkey.
Queensland.
Full of seeds—round black ones, grass seeds, &c.
(E.M.)—*Geijera.* These may be *Xanthoxylum* (spp., *e.g.*, thorny yellow wood), but the size and shape of the embryos seem to be *Geijera.* As these seeds appear in no less than fifteen of the specimens from the Murray to Queensland, I think they are probably *Geijera* spp.
Grass seed—only free internal grain; no glumes; cannot identify species or genus.

Turnix maculosa. (M. 15; H. 569.) Red-backed (Black-backed) Quail.
(a) Claudie River, N.Q., 29th September, 1913.
Seeds—small ovate black seeds; small kidney-shaped yellow seeds; one or two oblongate brownish seeds; one ovate small three-sided seed.
(J.H.M.)—*Swainsona* sp.; Legume (*Vicia*); *Polygonum aviculare,* L.; *Rumex* sp.
(b) Claudie River, N.Q., 7th October, 1913.
Minute cordate seeds, dotted in rows.
(c) Claudie River, N.Q., 26th October, 1913.
Seeds—small, oblongate brownish seeds; smaller, flattened kidney-shaped yellow seeds; one small round seed; two small black, strigose seeds.
Fragments of insects, unrecognisable.
(J.H.M.)—Legume (*Vicia*); *Polygonum* sp.

Geopelia humeralis. (M. 33; H. 546.) Barred-shoulder Dove.
Gular, 30th October, 1911.
Many hundred flat greyish-brown seeds.

Geopelia placida. (M. 34; H. 547.) Peaceful Dove.
(a) Gular, 30th October, 1911.
A number of small oval brownish seeds. Several larger flat white ones.
(J.H.M.)—*Panicum* sp. (*Graminea*). In addition there are also large flat seeds unknown to me.
(b) Sydney, 4th November, 1911.
Stomach contains a few small seeds. Crop contains numerous wheat grains and a little bread (bird had been feeding with domestic pigeons).
(c) Mannum, Murray River, South Australia, 26th November, 1913.
Seeds—(1) Small, ovate, greyish brown; (2) small, ovate, yellowish; (3) small, ovate, black; (4) small, round, rugulose, black; (5) larger, triangular, black; (6) small, ovate, yellow.
(J.H.M.)—(1) *Urtica incisa,* Poir.; (4) *Stellaria media,* Vill.; (5) *Polygonum aviculare,* L.
(d) Mannum, South Australia, 26th November, 1913.
Seeds—(1) Rounded, black, nitid; (2) small, rounded, rugose, some red, some black; (3) oval, greyish.
(J.H.M.)—(1) *Phytolacca octandra,* L.; (2) *Chenopodium* sp.; (2a) *Stellaria media,* Vill.; (3) *Urtica incisa,* Poir.

(e) Eidsvold, Queensland.
Small, round, dark-brown seeds.
(E.M.)—*Cyperaceæ.*

Phaps chalcoptera. (M. 37; H. 550.) Bronzewing Pigeon.
(a) Middle Harbour, Sydney, 27th December, 1909.
Numerous oval brownish and oval olive-coloured seeds.
(J.H.M.)—*Cassia* sp. (*Leguminosæ*). The brownish seeds are certainly leguminous and probably *Cassia,* but they do not agree exactly with any of the three Port Jackson Cassias. They come nearest to *Cassia lævigata,* and may be from that species.
(b) Murray Flats, near Blanchetown, South Australia, May, 1911.
Seeds and a leaf.
(E.M.)—Seeds of *Kochia,* perhaps *K. sedifolia,* F.v.M., together with pieces of the leaves.

Geophaps scripta. (M. 42; H. 555.) Partridge Bronze-winged Pigeon.
Queensland.
Oval blackish seeds.
(E.M.)—*Geijera.* (See M. 7; H. 567.)

Ocyphaps lophotes. (M. 46; H. 560.) Crested Pigeon.
(a, b) Rowena, near Collarenebri, 4th November, 1910.
Numerous small seeds of several kinds.
(J.H.M.)—I recognise none of the small seeds. Some of them leguminous seeds—*Trifolium* and one seems to be a *Vicia.*

Leucosarcia picata. (M. 47; H. 561.) Wonga Wonga Pigeon.
Hawkesbury River, 1st November, 1910.
Seven small land snails. Large seeds of several kinds.
(C. Hedley, F.L.S.)—The snails are *Nanina marmorata* (Cox). The species frequents decaying leaves, cracks in bark, &c. In wet weather it might ascend trees, but I should not call it of arboreal habits.
(J.H.M.)—The seeds are:—(1) *Exocarpus cupressiformis,* Labill.—native cherry; (2) *Elæocarpus cyaneus,* Ait.—fruit of "blue-berry" tree; (3) Seeds of a cyperaceous plant; (4) A large quantity of unknown seeds (*Rubiaceæ*); (5) Two unknown seeds, flat and curiously serrated.

Lobivanellus lobatus. (M. 147; H. 604.) Spur-winged Plover.
Upper Manilla, September, 1914.
(E.W.F.)—Insect remains—portions of beetles (*Coleoptera*), including *Amorphorrhinus* (*Amycterides*), and other weevils (*Curculionidæ*). Larval skin.
(W.W.F.)—Cutworms and wing covers. Eight small beetles.

Zonifer tricolor. (M. 149; H. 606.) Black-breasted Plover.
(a) Hallett's Cove, near Adelaide, 20th May, 1910.
A hymenopterous insect. Portions of a cricket (?). Numerous fragments of beetles and other insects. Several small leaves (? saltbush). Several minute yellow seeds. A minute brown seed, and a small elongated grass-like seed. A little sand.
(W.W.F.)—Remains of common mole cricket, legs and heads, and ants. Chief food, ants.

(J.H.M.)—Leaflets of a small leguminous plant, probably a *Trifolium* or *Medicago*. The seeds were identical with those found in *Ægialitis melanops* (M. 158) (Port Adelaide). They are not the perfect seed, being covered with a dark testa, which peels off when they swell in liquid. I could see the remains of the testa on several seeds.

(b) Hallett's Cove, near Adelaide, 20th May, 1910.

Numerous fragments of beetles, &c. A grub. Several minute yellow seeds.

(W.W.F.)—Chiefly remains of ants, wing covers of beetles, and a small caterpillar.

(J.H.M.)—For the small yellow seeds, see *Zonifer tricolor* (a), and *Ægialitis melanops* (M. 158).

Charadrius dominicus. (M. 151; H. 608.) Lesser Golden Plover.

Cronulla, Sydney, 2nd March, 1910.

Remains of winged ants. Other insects' remains. A small shell.

(W.W.F.)—Winged ants, worker ants. Slender caterpillar of moth. Elytra of a number of different ground beetles.

Ægialitis ruficapilla. (M. 157; H. 614.) Red-capped Dottrel.

Perth, September, 1909.

Fragments of insects; a small beetle; some other animal fragments.

(W.W.F.)—Chiefly beetle remains; anal appendages of some beetle larva; a small weevil.

Ægialitis melanops. (M. 158; H. 615.) Black-fronted Dottrel.

(a) Port Adelaide, 19th May, 1910.

Fragments of beetles and skins of larvæ of insects. A complete insect larva. Four small round yellow seeds.

(W.W.F.)—Small lepidopterous larvæ. Heads of ants and remains of wing covers of beetles.

(J.H.M.)—The small yellow seeds could not be identified. See under *Zonifer tricolor* (M. 149).

(b) Port Adelaide, 19th May, 1910.

Fragments of insects. Sand.

(W.W.F.)—Nothing definite. Wing covers of beetles.

Himantopus leucocephalus. (M. 161; H. 618.) White-headed Stilt.

Tailem Bend, South Australia, 31st May, 1910.

Several small freshwater shells of two kinds. Mud with diatoms, &c.

(C. Hedley, Australian Museum)—The larger shell is *Isadora waterhousii*, Clessing; the smaller, *Isadora aculispira*, Tryon.

Heteropygia aurita. (M. 181; H. 634.) Sharp-tailed Stint.

(a) Gular, 30th October, 1911.

Fragments of insects; a number of minute reddish brown seeds; a few minute black ones.

(W.W.F.)—Fragments of beetles, &c., unrecognisable.

(b) Gular, 30th October, 1911.

Fragments of insects.

(W.W.F.)—Four larvæ; one moth caterpillar (?); head and thorax of a Hydrophilid beetle; small black beetle (*Rhysodidæ?*); one fly pupa (Cyclorhaphous); numerous portions of small beetles.

(c) Gular, 30th October, 1911.

Fragments of insects; one small oval yellow seed.

(J.H.M.)—*Medicago* sp. (*Leguminosæ*), probably *M. sativa* (lucerne).

Ibis molucca. (M. 194; H. 702.) White Ibis.
Queensland.
Portions of crustaceans.
(A. R. McCulloch, Australian Museum)—*Grapsidæ.*

Herodias timoriensis. (M. 203; H. 710.) White Egret.
Queensland.
Remains of a shrimp. Portions of grasshoppers.
(W.W.F.)—Black cricket (*Gryllus servillei*). Young shrimp.

Notophoyx novæ-hollandiæ. (M. 204; H. 711.) White-fronted Heron.
Hawkesbury River, 6th August, 1910.
(A. R. McCulloch)—Crab, *Brachyura*; Nipper Prawn, *Alphæidæ*; prawn, *Penæidæ*—inhabitants of estuarine mud-flats.

Butorides stagnatilis. (M. 211; H. 718.) Thick-billed Bittern.
Hawkesbury River.
(A. R. McCulloch)—Fish, *Gobius* sp.; shrimp, *Leander* sp. (?)—inhabitants of estuarine mud-flats.

Biziura lobata. (M. 236; H. 763.) Musk Duck.
Hawkesbury River.
(A. R. McCulloch)—Mud crabs, *Macrophthalmus* sp., inhabitants of estuarine mud-flats.

Phalacrocorax carbo. (M. 237; H. 724). Black Cormorant.
Hawkesbury River, 6th April, 1910.
Portions of several catfish. Fragments of dead shells.

Astur fasciatus. (M. 258; H. 24.) Goshawk.
Hallett's Cove, Adelaide, May, 1910.
Remains of small bird about size of *Anthus.*

Haliastur sphenurus. (M. 267; H. 5.) Whistling Eagle.
(a) Adelaide, May, 1910.
Feathers of small bird.
(b) Tarcoon, October, 1914.
Stomach almost empty, containing a small tangled mass consisting of fibres of wool. Head of ant also present.

Hieracidea berigora. (M. 278; H. 16.) Striped Brown Hawk.
Flinders Island, Bass Straits, 25th November, 1912.
Full of beetle remains, &c.
(W.B.G.)—*Dasygnathus* (*Scarabæidæ*), probably five or six specimens, much broken.

Ninox boobook. (M. 283; H. 29.) Boobook Owl.
Mannum, Murray River, South Australia, 26th November, 1913.
Remains of large insects.
(E.W.F.)—Coleoptera—*Dynastidæ* and *Cerambycidæ* (*Phoracantha* sp.?). Orthoptera—Legs and mandibles of grasshopper.

Ninox rufa. (M. 292; H. 36.) Rufescent Powerful Owl.
Claudie River, N.Q., 13th September, 1913.
(E.W.F.)—Insect remains:—Several large Orthoptera—phasmids and large green grasshopper.

Geoffroyus McLennani.
(a) Pascoe River, N.Q., 20th July, 1913.
Crop contents—A number of fairly large, roughly conical or irregularly shaped, brownish seeds. Gizzard contents—Yellow and black grit. One fairly large oval seed.

(b) Juvenile. Pascoe River, 22nd July, 1913.
Crop and gizzard contents—Yellow grit; a few subtriangular seeds, yellowish brown in colour.
(J.H.M.)—*Rosa rubiginosa*, L.
(c) Pascoe River, 24th July, 1913.
Crop contents—Brownish masses, probably of vegetable origin. Gizzard contents—Black and yellow grit.
(d) Pascoe River, 4th August, 1913.
Crop contents—Ironstone pebbles. Gizzard contents—Yellow grit.
(e) Pascoe River, 4th August, 1913.
Crop contents—Ironstone pebbles. Gizzard contents—Yellow grit.
(f) Claudie River, 20th September, 1913.
Crop contents—Elongate pentahedral seeds and muddy débris. Stomach contents—Red grit. Œsophagus—A few seeds as in crop.
(g) Claudie River, 20th September, 1913.
Crop contents—As in (f). Stomach contents—Reddish grit; two reddish seeds. Œsophagus—A few seeds in cardiac end.

Eclectus macgillivrayi.
(a) Claudie River, 14th September, 1913.
Crop contents—Seeds. Moderately large, smooth, greyish, kidney-shaped seeds; smaller, somewhat irregularly shaped seed, reddish or brown.
Stomach contents—Grit; one small, somewhat irregularly shaped seed, reddish or brown.
(J.H.M.)—Legume, sp.?
(b) Claudie River, 30th September, 1913.
Stomach contents—Masses of yellow, red, and black grit. Œsophagus—Vegetable material?; several fairly large seeds, somewhat flattened.

Glossopsittacus porphyrocephalus. (M. 308; H. 473.) Purple-crowned Lorikeet.
Mount Lofty Range, South Australia, May, 1910.
Several stamens of *Eucalyptus cosmophylla* and masses of pollen of this species, which was in bloom at the time.

Cacatua galerita. (M. 320; H. 485.) White Cockatoo.
Nowra, 5th April, 1914.
(a, b, c) Stomach contents of three birds contained numerous seeds and quartz pebbles, also fragments probably of vegetable origin.
Seeds—(1) Moderately large, light reddish-brown, elliptical with short spine at apex; (2) Small, brownish, elongate, irregularly three-sided seeds; (3) Small black fragments, possibly remains of seed capsules.
(J.H.M.)—(1) *Sorghum vulgare*, Pers.

Cacatua roseicapilla. (M. 324; H. 489.) Rose-breasted Cockatoo (Galah).
(a) Yanco, 19th December, 1914.
Stomach contents—Grit; fibrous material, probably vegetable; two small seeds—(1) Small, angular, brownish; (2) Flat, ovate, yellow.
(b) Yanco, 19th December, 1914.
Stomach contents—Grit; fibrous vegetable tissue.
(c) Yanco, 19th December, 1914.
Stomach contents—Grit; seeds—(1) as in (a); (2) one larger round seed.
(d) Yanco, 19th December, 1914.
Stomach contents—Grit; grain of wheat.

(e) Belaringar, N.S.W., 14th April, 1915.
(E.W.F.)—Grit; whitish fragments, probably portions of broken seeds; a few small dark reddish-brown seeds.

Platycercus elegans. (M. 334; H. 498.) Pennant's Parrakeet.
(a) Milson Island, Hawkesbury River.
About eighteen large white seeds; several small white seeds.
(J.H.M.)—Young fruits, the exocarp corroded, of *Persoonia* sp. (fam. *Proteaceæ*).
(b) Wagga, July, 1914.
Dark blackish material, ? olive pulp; several small brown warty seeds; some larger oval seeds (? grain).
(c) Wagga, July, 1914.
Chiefly blackish material, ? olive pulp.
(d) Slopes of Mount Kosciusko, 13th December, 1910.
The crop contained a large number of whitish insect-larvæ.
(W.W.F.) The larvæ appear to be those of some beetle. They are legless and many seem to have been attacked by a fungus or other matter.
(e) Mt. Irvine, N.S.W., 5th June, 1915.
(E.W.F.)—Crop contents—Numerous dark brown angulate seeds; also whitish seeds. Stomach contents—Comminuted fragments of seeds.
(J.H.M.)—The seeds are :—*Eucalyptus* sp.; white seeds not identified.

Platycercus adelaidæ. (M. 336; H. 500.) Adelaide Parrakeet.
Mount Lofty Range, South Australia, May, 1911.
Seeds not identifiable.

Platycercus flaveolus. (M. 337; H. 501.) Yellow-rumped Parrakeet.
(a) Near Morgan, South Australia, 29th November, 1913.
Elongate, narrow, brown bodies—? seeds.
(b) Near Morgan, South Australia, 29th November, 1913.
Similar contents to (a).
(c) Near Morgan, South Australia, 29th November, 1913.
Similar contents to (a); small oblong seeds, bluntly pointed at one end.

Platycercus flaviventris. (M. 338; H. 502.) Yellow-bellied Parrakeet.
(a) Flinders Island, Bass Straits, 25th November, 1912.
Crop packed with small round greyish-yellow seeds, some reddish; also minute seeds.
(b) Flinders Island, 27th November, 1912.
Crop full of narrow elongated seeds.
(J.H.M.)—Not seeds, ? entomological.

Platycercus pallidiceps. (M. 339; H. 503.) Pale-headed Parrakeet.
Queensland.
Small, whitish and brownish seeds.
(E.M.)—Two pieces of quartz and many pieces of black mineral matter present. The rest of the specimen consists of the grain of some grass, but only an odd glume or two can be found and the species cannot be identified. There are many of the free grains present.

Platycercus eximius. (M. 343; H. 506.) Rosella.
(a) Wagga, N.S.W., July, 1914.
Seeds—Small, yellow, and greenish, ? grass seeds.
(J.H.M.)—*Capsella bursa-pastoris*, Mœnch.

(b) Gunnedah, February, 1911.
Small white, yellow, and orange seeds; fragments of charcoal.
(J.H.M.)—Seeds not recognised.
(c) Belaringar, N.S.W., 15th May, 1915.
(E.W.F.)—Crop contents—Numerous seeds of two kinds—(1) Small, ovate, flattened, yellow; (2) Minute, rounded, reddish-black. Stomach contents—Broken up seeds, similar to those in crop.
(W.M.C.)—The seeds are—(1) Not identified; (2) *Amaranthus* sp.
(d) Uralla, May-June, 1915.
(W.W.F.)—Several species of grass seeds; partly digested vegetable matter.

Barnardius barnardi. (M. 349; H. 513.) Barnard's Parrakeet.
(a) Willbriggie, 7th October, 1912.
A number of small seeds.
(b) Near Morgan, South Australia, 29th November, 1913.
Small ovate seeds, pointed at one end; also black hard fragments, possibly of seeds.

Psephotus hæmatorrhous. (M. 354; H. 517.) Crimson-bellied Parrakeet.
(a) Dubbo, September, 1911.
Numerous small whitish seeds.
(b) Moree, 5th October, 1909.
Many seeds—(1) small, yellow; (2) larger, orange; (3) long, narrow, whitish. Fragments of stamens (?). Fragments of charcoal (?), some floating.
(c) Belaringar, N.S.W., 15th May, 1915.
(E.W.F.)—Numerous seeds in the crop were lost. Stomach contents—Seeds—(1) minute, round, dark red; (2) larger, reddish seeds; (3) small, yellow, round; (4) more elongate, ovate.
(W.M.C.)—The seeds are—(1) *Amaranthus* sp.; (2) *Atriplex* sp.; (3) *Atriplex* sp.; (4) not identified.

Psephotus hæmatonotus. (M. 361; H. 524.) Red-backed Parrakeet.
(a) Orange, N.S.W., 13th July, 1909.
Crop shows a number of small, yellow seeds; some fragments of white seeds; some very small pieces of charcoal.
(J.H.M.)—The seeds are not identifiable.
(b) Orange, N.S.W., 13th July, 1909.
Crop distended with small purple seeds and slightly larger oval white ones (? both grasses).
(J.H.M.)—The seeds were not identifiable.
(c) Mannum, South Australia, 26th November, 1913.
Whitish masses resembling partially digested seeds; small ovate light yellow seeds.
(J.H.M.)—*Panicum* sp.

Podargus strigoides. (M. 376; H. 437.) Tawny Frogmouth (More Pork).
Milson Island, Hawkesbury River, 4th March, 1913.
(E.W.F.)—Insect remains—Coleoptera, fragments of longicorn beetle (*Phoracantha* sp.); insect egg capsules.

Podargus marmoratus. (M. 378; H. 439.) Marbled Frogmouth.
Pascoe River, N.Q., 13th August, 1913.
(E.W.F.)—Insect remains—Elytra of longicorn beetle; portion of grasshopper.

Eurystomus pacificus. (M. 381; H. 441.) Dollar Bird.

Hawkesbury River, February, 1910.

Three fiddler beetles (*Eupœcila australasiæ*) and fragments of another; a cicada.

(W.W.F.)—Chief food the rose chafers (*E. australasiæ*)—these were probably captured on the wing or round an *Angophora* bush where the beetles come to the flowers; *Psaltoda* sp. (cicada); another beetle, *Mordella* sp. (*Mordellidæ*); other beetle remains.

Dacelo gigas. (M. 386; H. 447.) Laughing Jackass.

Thredbo River, near Mount Kosciusko, 12th December, 1910.

Portions of cockchafers, &c.; some minute portions of quartz.

(W.W.F.)—Chiefly lamellicorn beetles (*Onthophagus* sp.); larvæ of beetles, probably *Anoplognathus* sp.

Halcyon pyrrhopygius. (M. 390; H. 451.) Red-backed Kingfisher.

Near Morgan, South Australia, 29th November, 1913.

(E.W.F.)—Small bones, ? of small lizard; remains of spider; portions of beetle (*Dytiscidæ*); legs of crustacean ?.

Halcyon sanctus. (M. 391; H. 452.) Sacred Kingfisher.

(a) Bathurst, January, 1910.

Remains of a fresh-water crayfish—Mr. McCulloch of the Australian Museum has kindly identified the specimen as *Thelphusa* sp.

(b) Canowindra, February, 1915.

(W.W.F.)—Remains of beetles and an almost perfect weevil; a spider.

Merops ornatus. (M. 396; H. 442.) Bee-eater.

(a) Queensland.

Portions of beetles (?) and hymenoptera.

(W.W.F.)—Native banded bee (*Podalirius* sp.)—Hymenoptera; tabanid fly (*Tabanus* sp.)—Diptera; *Sphex* sp.—Hymenoptera; red-bodied native bee.—Hymenoptera; remains of other flies, bees and beetles.

(b) Queensland.

Portions of hymenoptera and (?) other insects.

(W.W.F.)—Hymenoptera, *Thynnus* sp.; several bees; several frog-hoppers (*Eurymela* sp.); remains of beetles.

(c) Queensland.

Portions of Hymenoptera, &c.

(W.W.F.)—Ant-lion (*Glenurus* sp.); remains of cricket; forest fly (fam. *Dexiidæ*); another fly; remains of flies and beetles.

(d) Near Morgan, South Australia, 29th November, 1913.

(E.W.F.)—Insect remains, mainly Hymenoptera, some evidently ants, others unrecognisable.

(e) Coonabarabran, 29th September, 1914.

Insect remains—Wings, some probably of moths, others possibly dipterous; head of dipteron; larva.

(W.W.F.)—Earthworm, small diptera, small moths, and one small orthopteron.

Caprimulgus macrurus. (M. 399; H. 433.) Large-tailed Nightjar.

Claudie River, N.Q., 9th October, 1913.

(E.W.F.)—Insect remains—Prothorax of elaterid beetle (*Alaus* ?); remains of weevils and other Coleoptera.

Salangana (Callocalia) francica. (M. 401; H. 432.) Grey-rumped Swiftlet.
Claudie River, N.Q., 20th September, 1913.
(E.W.F.)—Numerous insect remains—Coleoptera—small beetles; one Buprestid (*Cisseis* sp.); Hymenoptera—small bees; Orthoptera—small crickets.

Cuculus inornatus. (M. 405; H. 456.) Pallid Cuckoo.
Upper Manilla, September, 1914.
Caterpillars; portions of cockroach; elytra of beetle.
(W.W.F.)—Mass of slender cutworm caterpillars.

Cacomantis flabelliformis. (M. 407; H. 457.) Fan-tailed Cuckoo.
(a) Flinders Island, Bass Straits, 22nd November, 1912.
Several very large grubs.
(W.B.G.)—Four or five larvæ of lamellicorn beetles (White Grubs).
(b) Flinders Island, 25th November, 1912.
(E.W.F.)—Insect remains—Small Hymenoptera, otherwise unrecognisable.
(c) Ourimbah, N.S.W., 18th November, 1911.
Remains of hairy caterpillars (?); many hairs, barbed.
(W.W.F.)—Remnants of about six hairy caterpillars.
(d) Berry, 10th August, 1910.
Portion of a large grub; remains of many insects.
(W.W.F.)—Remains of larvæ of saw fly (*Philomastix, Glaber*); specimens of two species of plant bugs (*Dindimus versicolor* and *Lygæus* sp.) and small moth caterpillar.

Chalcococcyx basalis. (M. 410; H. 461.) Narrow-billed Bronze Cuckoo.
Overland Corner, Murray River, South Australia, 2nd December, 1913.
(E.W.F.)—Numerous insect remains:—Coleoptera—*Ditropidius* sp. (*Chrysomelidæ*); elytra of ladybird, *Coccinella transversalis* (*Coccinellidæ*); remains of other beetles, including head of weevil. Hemiptera—Two bugs (*Pentatomidæ*); heads of other hemiptera. Orthoptera—Remains of grasshopper; portion of earwig. Hymenoptera—Heads of ants.

Chalcococcyx plagosus. (M. 412; H. 462.) Bronze Cuckoo.
(a) Perth, September, 1909.
Stomach lined by black hairs, mostly parallel to each other—microscopically these have thorn-like processes projecting from the sides (? hairs of caterpillar); rest of contents black and granular (fragments of hairs); three portions of a large insect (? caterpillar); a small piece of white quartz; microscopically an oval egg and a number of curved brownish bodies of regular shape.
(W.W.F.)—These are chiefly the remains of "Woolly Bear" caterpillars, as the heads are also on the bundles of hairs and skin—the caterpillars are probably the larvæ of a *Darala.*
(b) Queensland.
Full apparently of remains of hairy caterpillars.
(W.W.F.)—Lepidopterous larva (*Geometridæ*); Brown Looper caterpillar.

Chalcococcyx russata.
Claudie River, N.Q., 13th October, 1913.
(E.W.F.)—Stomach contents—Macerated heads and bodies of larvæ, ? sawfly larvæ.

Hirundo neoxena. (M. 429; H. 385.) House Swallow.

Cronulla, near Botany Bay, 2nd March, 1910.
Some fragments of insects.
(W.W.F.)—Fragments of undetermined beetle.

Cheramœca leucosternum. (M. 430; H. 387.) Black and White Swallow.

(a) Narrabri, N.S.W., January, 1912.
Portions of insects (beetles, &c.).
(W.W.F.)—Remains of wasps; remains of several undetermined species of ants.

(b) Narrabri, N.S.W., January, 1912.
Portions of insects (beetles, &c.).
(W.W.F.)—Two specimens of a scarabid beetle (*Liparetrus villosicollis*); remains of parasitic wasps (*Braconidæ*).

Chelidon ariel. (M. 432; H. 389.) Fairy Martin.

(a) Gular, 30th October, 1911.
Numerous fragments of insects.
(W.W.F.)—Scraps of beetles, including a staphylinid; a fly; wings of a parasitic Hymenopteron.

(b) Near Morgan, South Australia, 29th November, 1913.
(E.W.F.)—Insect remains:—Coleoptera—Small lady bird, *Scymnus notescens*. Hemiptera—Bugs (*Pentatomidæ*). Hymenoptera—Unrecognisable remains.

(c) Near Morgan, South Australia, 29th November, 1913.
(E.W.F.)—Insect remains:—Coleoptera—Thorax of beetle (*Scarabæidæ*); remains of other beetles (? *Hydrophilidæ*); other unrecognisable insect remains.

Micræca fascinans. (M. 433; H. 86.) Brown Fly-catcher.

(a) Near Blanchetown, South Australia, 29th November, 1913.
(E.W.F.)—Insect remains:—Coleoptera—Portions of *Liparetrus* sp.; *Paropsis* sp.; *Heteronyx* ? sp. Hymenoptera—Remains of ants.

(b) Sydney, 4th November, 1911.
Portions of insects.
(W.W.F.)—Numerous ant heads—a specimen of *Camponotus nigriceps*; beetle elytra; a portion of a small caterpillar.

(c) Eidsvold, Q. (Dr. Bancroft).
Portions of beetles.
(W.W.F.)—Remains of chrysomelid beetles (genus *Paropsis*).

(d) 10th April, 1909, Sydney.
An ant, a ladybird, beetle's case, and remains of insects.

(e) Cronulla, near Botany Bay, 2nd March, 1910.
Fragments of insects.
(W.W.F.)—Heads of ants; remains of various ground beetles; a small butterfly (? lycænid); a spider.

(f) Bowral, April, 1910.
Remains of large insects; a grub.
(W.W.F.)—Ants, small maggots, diptera, wings of gnats.

(*g*) Queensland.
Portions of beetles.
(W.W.F.)—Beetle and ant remains, and remains of small Orthoptera.

(h) Queensland.
Portions of beetles.
(W.W.F.)—Remains of ants and beetles.

(i) Queensland.
Portions of beetles.
(W.W.F.)—Chiefly ants, a few remains of beetles.

(j) Queensland.
Portions of beetles.
(W.W.F.)—Beetle and ant remains; small caterpillar; and remains of small Orthoptera.

(k) Queensland.
A ladybird, fragments of beetles, &c.
(W.W.F.)—Wood ants (*Polyrhachis* sp.); chrysomelid beetle (*Paropsis* sp.); two small spiders.

Petrœca leggei. (M. 438; H. 90.) Scarlet-breasted Robin.

Adelaide, 14th May, 1910.
Numerous fragments of beetles, &c.
(W.W.F.)—Heads of ants, small caterpillars, and wings of moths.

Petrœca phœnicea. (M. 440; H. 92.) Flame-breasted Robin.

(a) Adelaide, 14th May, 1910.
Portions of beetles and numerous minute fragments of insects.
(W.W.F.)—Nothing definite among beetle remains.

(b) Adelaide, 14th May, 1910.
Portions of beetles and insect larvæ (?), and numerous fragments of insects.
(W.W.F.)—Termites (white ants) (*Coptotermes lacteus*) and wing covers of beetles.

(c) Bowral, April, 1910.
Numerous remains of insects.
(W.W.F.)—Remains of small ants; apparently nothing else.

(d) Slopes of Mount Kosciusko, 12th December, 1910.
Fragments of beetles; a grub.
(W.W.F.)—Wings of flies (Diptera); a small moth, larva of a moth; small ground beetles.

(e) Flinders Island, Bass Straits, 25th November, 1912.
Portions of beetles, &c.
(W.B.G.)—A few portions of beetles (*Histeridæ* and *Cerambycidæ*).

Petrœca rosea. (M. 443; H. 94.) Rose-breasted Robin.

(a) Hawkesbury River, 11th June, 1909.
Fragments of small beetles and insects; an ant.
(W.W.F.)—Several ants; small ground beetles, amongst them the elytra of a clerid.

(b) Milson Island, Hawkesbury River, 29th June, 1912.
A number of insect fragments, apparently chiefly beetles.
(W.W.F.)—Fangs of a spider, remains of ants and a small brown beetle.

Petrœca goodenovii. (M. 444; H. 93.) Red-capped Robin.

(a) Dubbo, September, 1911.
Fragments of beetles.
(W.W.F.)—Portions of ants and beetles.

(b) Tailem Bend, South Australia, May, 1910.
Numerous small fragments of insects.
(W.W.F.)—Remains of small flies (Diptera), and some ant remains.
(c) Adelaide, 14th May, 1910.
Portions of beetles and numerous fragments of insects.
(W.W.F.)—Wings of moths; leg of grasshopper.

Petrœca bicolor. (M. 446; H. 97.) Hooded Robin.
Port Adelaide, 19th May, 1910.
Remains of a large spider. Beetles and other insect remains.
(W.W.F.)—Spiders; small ants; legs of cricket; wing covers of beetles.

Smicrornis brevirostris. (M. 449; H. 100.) Short-billed Tree-Tit.
(a) Eidsvold, Queensland.
Several oval, rough, dark brownish seeds.
(E.M.)—*Geijera* (see M. 7; H. 567)—the rough and brownish appearance is due to the testa being digested at numerous points, giving a pitted appearance.
(b) Tailem Bend, South Australia, May, 1910.
Numerous minute fragments of insects.
(W.W.F.)—Indefinite fragments of the wing covers of beetles.
(c) Tailem Bend, South Australia, May, 1910.
Numerous minute fragments of insects.
(W.W.F.)—Indefinite fragments of the wing covers of beetles.
(d) Murray Flats, South Australia.
Fragments of insects.
(W.W.F.)—No insect remains that can be determined.
(e) Eidsvold, Queensland.
Some minute fragments of insects and vegetable tissue.
(f) Cobar, September, 1911.
Numerous comminuted fragments of insects.
(W.W.F.)—Insect fragments non-determinable.
(g) Milson Island, July, 1912.
Fragments of insects.
(W.W.F.)—Remains of insects—nothing definite.
(h) Near Morgan, South Australia, 29th November, 1913.
(E.W.F.)—Insect remains, unrecognisable; metallic fragments, probably portions of beetle elytra.
(i) Near Morgan, South Australia, 29th November, 1913.
(E.W.F.)—Insect remains, metallic fragments, elytra of beetle (*Mordella* sp.).

Gerygone albigularis. (M. 451; H. 102.) White-throated Fly-eater.
Molong, N.S.W.
(E.W.F.)—Fragments of insects, beetles.

Pseudogerygone magnirostris. (M. 457; H. 110.) Large-billed Fly-eater.
Claudie River, N.Q., 29th October, 1913.
(E.W.F.)—Coccinellid beetle; portions of weevil.

Pseudogerygone fusca. (M. 459; H. 106.) Brown Fly-eater.
(a) Berry, 13th July, 1910.
Fragments of insects.
(W.W.F.)—Chiefly the remains of small Diptera (*Tipula* sp.) and others; remains of ants, and one wing cover of beetle.

(b) Lisarow, New South Wales, 1st May, 1915.
(E.W.F.)—Fragments of insects, mostly unrecognisable; one small weevil (*Storeus* sp., *Erirhinides*) complete.

Rhipidura albiscapa. (M. 476; H. 133.) White-shafted Fantail.
(a) Hawkesbury River, 13th August, 1910.
(G. P. Darnell-Smith)—Insects.
(b) Queensland.
Portions of insects.
(W.W.F.)—Small homopterous insect (*Cercopidæ*), ants, and several native bees.

Rhipidura isura. (M. 486.)
(a) Claudie River, N.Q., 15th September, 1913.
(E.W.F.)—Small beetle (*Eucnemidæ*).
(b) Claudie River, N.Q., 15th September, 1913.
(E.W.F.)—Insect remains—Portions of Hymenoptera, one wingless female.

Rhipidura tricolor. (M. 487; H. 139.) Black and White Fantail; Wagtail.
(a) Sydney, 7th June, 1909.
Many fragments of insect wings, elytra, &c.
(W.W.F.)—Remains of small flies (Diptera).
(b) Sydney, 10th April.
Beetle cases in stomach.
(c) Eidsvold, Queensland.
Fragments of insects.
(W.W.F.)—Chiefly the remains of ants and small beetles.
(d) Queensland.
Portions of insects.
(W.W.F.)—Robber flies (*Asilidæ*)—wings, legs, and head.
(e) Sydney, 4th November, 1911.
Numerous comminuted fragments of insects, some metallic.
(W.W.F.)—Numerous comminuted fragments of insects (including several dipterous wing portions.)

Myiagra rubecula. (M. 488; H. 143.) Leaden Fly-catcher.
(a) Milson Island, Hawkesbury River.
Unrecognisable insect remains.
(b) Hawkesbury River, 27th October, 1912.
Portions of insects and a fly.
(W.B.G.)—Portion of a small cicada (*Melampsalta*?); head of fly (*Asilidæ*); damaged fly (probably *Sarcophaga*).
(c) Hawkesbury River, December, 1909.
Portions of several large insects; a small vegetable capsule containing little round seeds.
(W.W.F.)—Small froghoppers (Homoptera) taken on foliage; several species of cicada; remains of several species of beetles; chiefly homopterous insects (*Cercopidæ*).
(d) Hawkesbury River, 20th November, 1909.
Fragments of beetles and other insects.
(W.W.F.)—Syrphid flies, a number; several muscid flies; a native bee; few, if any, beetle remains; flies and small Hymenoptera the chief food.

Myiagra nitida. (M. 490; H. 144.) Satin Fly-catcher.

Slopes of Mount Kosciusko, 10th December, 1910.

Fragments of beetles, &c.

(W.W.F.)—Remains of small beetles.

Sisura inquieta. (M. 493; H. 148.) Restless Fly-catcher.

(a) Tailem Bend, South Australia, May, 1910.

Remains of a number of insects.

(W.W.F.)—Remains of small moths (Lepidoptera) and spiders.

(b) Canowindra, February, 1915.

(W.W.F.)—Whole stomach full of remains of blow-flies (*Calliphora rufifacies* and *C. flavipes*).

(c) Canowindra, February, 1915.

(W.W.F.)—Same as (b) with the addition of a few beetle heads.

Monarcha melanopsis. (M. 501; H. 156.) Black-faced Fly-catcher.

Ourimbah, 18th November, 1911.

Portions of beetles.

(W.W.F.)—Fragments of Hymenoptera and of beetles including a curculionid.

Coracina robusta. (M. 504; H. 78.) Black-faced Cuckoo Shrike.

(a) Berry, 9th August, 1910.

A large seed like a small loquat seed; portion of a large greenish grub.

(W.W.F.)—Two specimens of the spiny stinging slug or cup moth larva (*Doratifera vulnerans*); larva of green hawk-moth (?); another small moth larva; wing covers of chrysomelid beetle (*Paropsis*); fragments of eucalyptus leaves.

(J.H.M.)—A single seed-pod which looks like a pod of *Gompholobium*, but no seeds inside; I am not sure about it, but can give no better explanation.

(b) Hawkesbury River, 16th October, 1910.

Stomach dyed purple; three large kinds of beetles and many fragments of insects.

(W.W.F.)—One buprestid beetle (perfect); one clerid beetle (*Trogodendron fasciculatum*); lamellicorn beetles and various weevils.

(J.H.M.)—The seeds are:—(1) *Exocarpus cupressiformis*, Labill.—Native Cherry; (2) small seeds of an unidentified plant.

(c) Coonalpyn, South Australia.

Portions of grasshoppers.

(W.W.F.)—Remains of small green mantis and a few beetle wings.

(d) Tarcoon, N.S.W., 23rd October, 1914.

Numerous small greyish bodies (? seeds); a few insect remains (Hemiptera).

(W.M.C.)—No sign of seeds; the small bodies appear to be of animal origin.

(e) Tarcoon, N.S.W., October, 1914.

(E.W.F.)—Insect remains—Fragments of grasshopper; head of wasp; otherwise unrecognisable.

(f) Upper Manilla, September, 1914.

(E.W.F.)—Insect remains—Portions of grasshopper; caterpillar; heads of green beetles (? *Callodes*).

Coracina parvirostris. (M. 505; H. 79.) Small-billed Cuckoo Shrike.
Flinders Island, Bass Straits, 25th November, 1912.
Several large beetles.
(W.B.G.)—*Pterohelæus* (*Tenebrionidæ*); numerous weevil remnants including *Gonipterus* and various species.

Coracina mentalis. (M. 507; H. 81.) Little Cuckoo Shrike.
(a) Eidsvold, Queensland (Dr. Bancroft).
Remains of a large grub; several small beetles, &c.; eight black slightly curved seeds about ¼ in. long.
(W.W.F.)—Coleoptera (fam. *Chrysomelidæ*, *Cadmus* sp., nearly perfect); other chrysomelid beetles; weevils; lepidopterous larva.
(J.H.M.)—Seeds unknown to me.
(b) Coonabarabran, 29th September, 1914.
(E.W.F.)—Insect remains—Hemiptera; small weevil (*Læmosaccidæ*).

Coracina lineata. (M. 508; H. 82.) Barred Cuckoo Shrike.
Pascoe River, N.Q., 11th July, 1913.
Portions of figs.
(J.H.M.)—*Ficus* sp.

Edoliisoma tenuirostre. (M. 509; H. 83.) Jardine's Caterpillar-eater.
Queensland.
Remains of grasshoppers (?); some large blackish seeds.
(W.W.F.)—Orthoptera—long-horned grasshopper, probably a form of tree-cricket, but no thighs or head to identify.
(E.M.)—*Geijera* seeds. (See M. 7; H. 567.)

Lalage tricolor. (M. 510; H. 84.) White-shouldered Caterpillar-eater.
Milson Island, Hawkesbury River, 17th October, 1912.
Insect remains, amongst them a moth; small greyish seed-like bodies (microscopically showing vascular bundles).
(W.B.G.)—Fragment of moth (*Noctuidæ ?*).
(J.H.M.)—Seeds are *Leucopogon* sp.

Cinclosoma punctatum. (M. 515; H. 212.) Spotted Babbling Thrush (Ground-thrush).
Sydney, 3rd October, 1910.
A number of seeds—amongst them seeds like wheat, small yellow seeds, small speckled seeds; a few small pieces of stone.
(J.H.M.)—Seeds of two leguminous plants, probably *Trifolium* and *Medicago.*

Cinclosoma castanonotum. (M. 516; H. 213.) Chestnut-backed Babbling Thrush (Ground-thrush).
(a) South Australia.
Some oval black seeds, some longer yellow ones, and a grass seed.
(E.M.)—*Geijera* (see M. 7; H. 567)—some whole, some broken, and the cotyledons free, and so appear as yellow seeds.
One grass seed—*Bromus*—appears to be *B. sterilis*, L.
(b) Alawoona, South Australia, December, 1913.
(E.W.F.)—Insect remains—Head of fly (Diptera); portion of elytra of beetle (Coleoptera). Seeds—Minute, light brownish.
(c) Alawoona, South Australia, December, 1913.
(E.W.F.)—Insect remains—Ants (*Formicidæ*); beetle (*Tenebrionidæ*). Seeds—Reddish, oval.

(d) Alawoona, South Australia, December, 1913.
(E.W.F.)—Insect remains—Fragments of beetles.
Seeds—(1) Small greyish rounded seeds; (2) wheat grains.
(J.H.M.)—*Cyperaceæ*.

Drymaœdus brunneopygius. (M. 521; H. 218.) Scrub Robin.
(a) Alawoona, South Australia, December, 1913.
(E.W.F.)—Insect remains—Ants (*Formicidæ*); beetle (*Tenebrionidæ*).
Seeds—Minute, reddish.
(b) Coonalpyn, South Australia.
Fragments of a beetle, &c.
(W.W.F.)—Ants and heteromerous beetles, &c.
(c) Fragments of insects, &c.
(W.W.F.)—Remains of ants and small beetles.
(d) Murray Flats, South Australia.
Fragments of insects; about a dozen large round seeds.
(W.W.F.)—Hard black seeds and remains of ants.
(E.M.)—Seeds of *Geijera*. (See M. 7; H. 567.)

Hylacola cauta. (M. 525; H. 222.) Red-rumped Ground Wren.
Coonalpyn, South Australia.
Fragments of beetles, &c.
(W.W.F.)—Remains of beetles and small leaf-hoppers (*Cercopidæ*).

Psophodes crepitans. (M. 526; H. 223.) Coach-whip Bird.
(a) Bulli, N.S.W., 17th April, 1909.
(W.W.F.)—Remains of beetles of genus *Onthophagus* (fam. *Scarabœidæ*)—probably captured by the birds about fresh cow-dung, on which the beetles feed.
(b) Hawkesbury River, November, 1909.
Numerous fragments of insects.
(W.W.F.)—A large quantity of the heads and legs of ants, chiefly *Ectatomma metallicum*, "the green-head;" a few dipterous maggots; wings of small ground beetles; small bundles of vegetable fibre, like the tips of some small weed; other seeds—vegetable and animal matter about equal.
(c) Hawkesbury River, 20th November, 1909.
Numerous fragments of insects; a few small yellow seeds.
(W.W.F.)—Chiefly vegetable matter, as in (b); remains of the same "green-head ant," and one or two beetles.
(d) Middle Harbour, Sydney, 2nd April, 1910.
Remains of beetles, &c.
(W.W.F.)—Several spiders and remains; heads of ants; heads of small plant bug; bits of legs and wing cases of beetles; plant tissue similar to that in (b) and (c).

Pomatostomus frivolus. (M. 529; H. 226.) Babbler.
(a) Rowena, near Collarenebri, N.S.W., November, 1910.
Remains of insects.
(W.W.F.)—Remains of beetle wings.
(b) Rowena, near Collarenebri, N.S.W., November, 1910.
Remains of insects.
(W.W.F.)—Remains of small locust and bits of wing covers of beetles.

(c, d, e) Canowindra, February, 1915.
(W.W.F.)—All three stomachs contain nothing but a mass of broken remains of ground beetles and of ants; in one there are two moth caterpillars.

(f) Gunnedah.
Fragments of insects.
(W.W.F.)—Remains of wings and of Coleoptera (beetles).

(g) Eidsvold, Queensland (Dr. Bancroft).
Portion of a large grub; remains of a beetle.
(W.W.F.)—An ant-lion larva (Neuroptera); lamellicorn beetle grub; beetle remains; lepidopterous larvæ.

Pomatostomus superciliosus. (M. 530; H. 227.) White-browed Babbler.

(a) Tailem Bend, South Australia, May, 1910.
Portions of a cockroach; a young grasshopper.
(W.W.F.)—Cockroach (*Panesthia* sp.); remains of shield bugs (*Eumecopus australasiæ*) (these bugs are found on the foliage of young gum trees); wing covers of heteromerous beetle.

(b) Tailem Bend, South Australia, May, 1910.
Portions of a cockroach.
(W.W.F.)—One cockroach; small red ants; plant bugs; beetle remains; legs of small mole cricket.

(c) Hallett's Cove, near Adelaide, 20th May, 1910.
Portions of beetles and other insects.
(W.W.F.)—Remains of small click beetles, earwigs, and other beetles.

Oreocichla lunulata. (M. 544; H. 160.) Mountain Thrush.
Bulli, N.S.W., 17th April, 1909.
(W.W.F.)—Remains of some ground-living beetle—species cannot be determined.

Oreocichla macrorhyncha. (M. 545; H. 161). Large-billed Ground-thrush.
Mt. Arthur, near Launceston, Tasmania, 29th November, 1912.
Two grubs, beetle remains, &c.
(W.B.G.)—Wire-worm (beetle larva, *Tenebrionidæ*); head and thorax of *Adelium* sp. (*Tenebrionidæ*); beetle larvæ.

Ephthianura albifrons. (M. 546; H. 235.) White-fronted Chat.

(a) Canowindra, February, 1915.
(W.W.F.)—Seeds—various; the only insects—two small chalcid wasps.

(b) Canowindra, February, 1915.
Seeds and some remains of ants.

Ephthianura tricolor, Gould. (M. 547; H. 236.) Tricoloured Chat.

(a) Molong, N.S.W., October, 1913.
(E.W.F.)—Insect remains—fragments of beetle; head of bug (Hemiptera).

(b) Molong, N.S.W., October, 1913.
(E.W.F.)—Insect remains—Coleoptera (Weevil—*Storeus* sp.?); Hemiptera.

(c) Molong, N.S.W., October, 1913.
(E.W.F.)—Insect remains—Hemiptera.

Megalurus galactotes. (M. 555; H. 184.) Tawny Grass-bird.
Claudie River, N.Q., 2nd October, 1913.
(E.W.F.)—Numerous insect remains—heads of Hemiptera; one almost complete bug (? *Reduviidæ*).

Origma rubricata. (M. 557; H. 185.) Rock Warbler.

(a) Hawkesbury River, 11th June, 1909.

A number of small seeds and parts of seeds of several kinds; a little sand.

(J.H.M.)—Seeds of *Chenopodiaceæ*—perhaps species of *Chenopodium* or *Atriplex.*

(b) Hawkesbury River, 11th June, 1909.

Several brownish purse-shaped seeds and some smaller white ones; no insect remains.

(c) Hawkesbury River, November, 1909.

Some minute fragments of insects; some oval dark olive seeds, microscopically with tubercular surfaces.

(W.W.F.)—Dipterous larvæ chiefly; a few bits of beetle wings—suggest feeding on the ground among horse or cow droppings.

(d) Middle Harbour, Sydney.

Insects remains (beetles, &c.); about fifteen small oval yellowish-white seeds.

(W.W.F.)—Beetle remains; several undetermined weevils.

(J.H.M.)—*Panicum* sp. (*Gramineæ*).

Chthonicola sagittata. (M. 558; H. 187.) Little Field Wren.

(a) Queensland.

Seeds—(1) Small triangular brown ones; (2) larger oval yellowish-brown ones; a few minute fragments of insects.

(E.M.)—(1) Eight seeds of *Cyperaceæ* with triangular cross-section; (2) *Setaria glauca.*

(b) Picton, June, 1914.

(E.W.F.)—Insect remains—Portion of weevil (? *Mandalotus* sp.); seeds—(1) small, ovate, pale yellow; (2) smaller, oval, reddish, transversely rugose; (3) small, round, verrucose, black; (4) larger, dark red, rounded.

(J.H.M.)—(1) *Panicum* sp.; (2) *Oxalis corniculata*, L.; (3) *Ionidium filiforme*, F.v.M.

Acanthiza nana. (M. 559; H. 188.) Little Tit.

(*a*) Sydney, 19th October, 1910.

Small fragments of insects, many pink coloured; a small beetle.

(W.W.F.)—Remains of various small beetles; wings of gnats.

(b) Picton, N.S.W., June, 1914.

(E.W.F.)—Insect remains—fragments of beetles; larva (? caterpillar).

(c) Picton, N.S.W., June, 1914.

(E.W.F.)—Insect remains, unrecognisable.

(d) Dubbo, 17th March, 1915.

(E.W.F.)—Insect remains—portions of weevils; otherwise unrecognisable.

(e) Hawkesbury River, 18th April, 1915.

(E.W.F.)—Insect remains—portion of small beetles, including a weevil (*Misophrice*)—otherwise unrecognisable.

Acanthiza inornata. (M. 560; H. 189.) Plain-coloured Tit.

Middle Harbour, Sydney.

Fragments of insects.

(W.W.F.)—Remains of weevil (*Curculionidæ*); remains of plant bug (*Lygæidæ*); wing of moth; legs and wings of beetles; remains of Hymenoptera.

Acanthiza pusilla. (M. 561; H. 190.) Brown Tit.

(a) Hawkesbury River, 6th April, 1910.
Fragments of insects (?); part of a grub.
(W.W.F.)—Several lepidopterous larvæ; wings of small flies; wing case of small beetles.

(b) Middle Harbour, Sydney, 15th April, 1911.
Fragments of insects; small white eggs of insect.
(W.W.F.)—Beetle remains and some bits of wings of lace-wings.

(c) Kurrajong Heights.
Fragments of insects.
(W.B.G.)—Indeterminable fragments of beetles and other insects.

(d) Bibbenluke, N.S.W.
(E.W.F.)—Insect remains—Coleoptera and Hemiptera.

Acanthiza diemenensis. (M. 565; H. 191.) Brown-rumped Tit.

(a) Flinders Island, Bass Straits, 22nd November, 1912.
Fragments of beetles, &c.
(W.B.G.)—Head of caterpillar; parts of *Diphucephala* (*Scarabæidæ*), and other small beetles.

(b) Mt. Arthur, near Launceston, 30th November, 1912.
Fragments of insects.
(W.B.G.)—Indeterminable fragments of small beetles and other insects.

Acanthiza pyrhopygia. (M. 563; H. 193.) Red-rumped Tit.

(a) Monarto South, South Australia, July, 1914.
(E.W.F.)—Insect remains—fragments of beetles.

(b) Willbriggie, near Yanco, 7th October, 1912.
Numerous minute fragments of insects. A beetle.
(W.B.G.)—*Malacodermidæ* (small specimen); small weevil (*Curculionidæ*); numerous particles of beetles, and a few small Hymenoptera.

(c) Tailem Bend, South Australia, May, 1910.
Some fragments of insects; a small piece of green leaf.
(W.W.F.)—Nothing definite; fragments of the wing covers of beetles; green-head ants.

(d) Coonalpyn, South Australia.
Fragments of small beetles, &c.
(W.W.F.)—Termites' (white ants) wings; remains of small beetles.

(e) Coonalpyn, South Australia.
Fragments of small beetles, &c.
(W.W.F.)—Remains of small beetles, but nothing definite.

Acanthiza lineata. (M. 569; H. 194.) Striated Tit.

(a) Sydney, 15th October, 1909.
Numerous fragments of insects.
(W.W.F.)—Small Coleoptera (weevils, *Chrysomelidæ*, &c., that were probably taken upon the foliage of young gum trees); small Neuroptera; also remains of Diptera.

(b) Middle Harbour, Sydney, 1st August, 1910.
Stomach full of insect fragments, amongst them the skins of some insect pupæ.
(W.W.F.)—Remains of small spider; wing of flies; small larvæ and beetle remains.

(c) Adelaide, South Australia, May, 1910.
Fragments of beetles, &c.
(W.W.F.)—Plant bugs; dipterous larvæ; small caterpillar; remains of beetles.
(d) Middle Harbour, Sydney, 3rd October, 1910.
Small fragments of beetles.
(W.W.F.)—Remains of small beetles and small Hemiptera.
(e) Middle Harbour, Sydney.
Fragments of insects.
(W.W.F.)—Remains of Coleoptera and Hymenoptera.
(f) Locksley, N.S.W., February, 1911.
Fragments of beetles, &c.
(W.W.F.)—Very small fragments of beetles.
(g) Mt. Irvine, N.S.W., 5th June, 1915.
(E.W.F.)—Comminuted fragments of insects; remains of small flies (? *Cecidomyidæ*).
(h) Uralla, May-June, 1915.
(W.W.F.)—Remains of ants; elytra of small beetles and other beetle remains.

Acanthiza uropygialis. (M. 573; H. 195.) Chestnut-rumped Tit.
(a) Cobar, September, 1911.
Fragments of insects.
(W.W.F.)—Unrecognisable fragments of beetles and Hymenoptera.
(b) Cobar, September, 1911.
Fragments of insects.
(W.W.F.)—Portion of psyllid; wings of a thrips; unrecognisable fragments.
(c) Dubbo, September, 1911.
Fragments of small beetles, &c.
(W.W.F.)—Portions of beetles and hymenopterous wings.
(d) Dubbo, September, 1911.
Fragments of small beetles, &c.
(W.W.F.)—Fragments of beetles and Hymenoptera (undeterminable).
(e) Overland Corner, South Australia, 2nd December, 1913.
(E.W.F.)—Insect remains—Heads of bugs; otherwise unrecognisable.
Seeds—Small, ovate, flattened.
(J.H.M.)—*Urtica incisa*, Poir.
(f) Overland Corner, South Australia, 2nd December, 1913.
(E.W.F.)—Insects remains—Elytra of beetle; elytra of bug (Hemiptera).
Seeds—Three small, black, round seeds.
(J.H.M.)—Seeds—*Chenopodium* sp.
(g) Mannum, South Australia, 26th November, 1913.
(E.W.F.)—Insect remains—Coleoptera (*Liparetrus* sp. and *Anthicus* sp.).
(h) Murray Flats, South Australia.
Two small brown disc-shaped seeds; fragments of insects.
(E.M.)—Salt-bush, but species not identifiable—seed only present without membranes, &c. (N.O. *Chenopodiaceæ*).
(W.W.F.)—Chiefly dipterous remains.

Acanthiza chrysorrhoa. (M. 574; H. 196.) Yellow-rumped Tit.
(a) Berry, 10th August, 1910.
Fragments of insects.
(W.W.F.)—Remains of beetles, wing covers and legs; small moth grub.

(b) Picton, June, 1914.
(E.W.F.)—Insect remains—Beetles (*Mandalotus* sp.), otherwise unrecognisable.

Acanthiza reguloides. (M. 575; H. 197.) Buff-rumped Tit.
(a) Locksley, February, 1911.
Fragments of insects.
(W.W.F.)—Remains of small grasshopper and beetle remains.
(b) Dubbo, September, 1911.
Fragments of insects; several scale insects.
(W.W.F.)—Several parts of Hymenoptera and beetles.
(c) Picton, N.S.W., June, 1914.
(E.W.F.)—Insect remains—Head of ant; fragments of beetle.
(d) Picton, N.S.W., June, 1914.
Insect remains—Fragments of beetles and ants.
(e) Sydney, 10th April, 1909.
Beetles' cases, &c.
(f) Bowral, April, 1910.
Numerous fragments of insects.
(W.W.F.)—Wings of small moths; heads of ants and small grubs.
(g) Gosford, 24th May, 1915.
(E.W.F.)—Fragments of insects, remains of small weevil, otherwise unrecognisable.

Sericornis brunnea. (M. 580; H. 199.) Red-throat.
Queensland.
Portions of a large insect; several long curved yellow "seeds."
(W.W.F.)—Larvæ of moth; beetle remains.
(E.M.)—Not seeds—insect eggs and embryos.

Sericornis barbara. (M. 581; H. 200.) Yellow-throated Scrub-Wren.
Mt. Irvine, N.S.W., 5th June, 1915.
(E.W.F.)—Small round black seeds; small oblongate brownish seeds; small, oval, yellowish seeds.
(J.H.M.)—The seeds are those of *Phytolacca octandra*, L. (Ink Weed); *Chenopodium album*, L. (Fat-hen); a native legume?; and a small yellow seed not identified.

Sericornis flindersi.
Flinders Island, Bass Straits, 22nd November, 1912.
Small yellowish and greyish seed-like bodies; fragments of beetle and other insects.
(W.B.G.)—Head of tiger beetle (*Cicindelidæ*); head of weevil (*Curculionidæ*); numerous small beetle parts.
(J.H.M.)—The greyish seeds are *Leucopogon* sp.

Sericornis frontalis. (M. 582; H. 201.) White-browed Scrub Wren.
(a) Middle Harbour, Sydney, 2nd April, 1910.
Remains of a spider (?) and grub (?); some small white oat-shaped seeds and a curved black one.
(W.W.F.)—One spider; a large lepidopterous larva; a May fly (Neuroptera) and wings of another neuropterous insect; a few remains of Coleoptera.
(J.H.M.)—*Panicum marginatum*, R.Br. (*Gramineæ*)—I am not quite sure about the species, but it is certainly *Panicum* seed.

(b) Middle Harbour, Sydney, 11th June, 1910.
Numerous remains of insects; several small seeds of three kinds.
(W.W.F.)—Egg capsule of cockroach; remains of small beetles; a book scorpion.
(J.H.M.)—A few grass seeds, evidently *Panicum*, but I do not recognise the species; a seed of a leguminous plant, but I do not recognise the genus; a seed of a plant that seems to be compositous, with all the traces of the pappus gone.

(c) Lisarow, N.S.W., 1st May, 1915.
(E.W.F.)—Fragments of insects, unrecognisable. Seeds—small ovate, yellowish.
(W.M.C.)—The seeds are (1) *Setaria viridis* (Pigeon Grass); (2) *Panicum* sp.; (3) *Siegesbeckia orientalis*, L.

(d) Lisarow, N.S.W., 1st May, 1915.
(E.W.F.)—Fragments of insects, unrecognisable. Seeds—(1) small, ovate, yellowish; (2) small, conical, slightly curved, black; (3) small, oblongate, brown.
(W.M.C.)—The seeds are—(1) *Setaria viridis* (Pigeon Grass) and *Panicum* sp.; (2) *Siegesbeckia orientalis*, L.; (3) *Geranium* sp.

(e) Mt. Irvine, N.S.W., 5th June, 1915.
(E.W.F.)—Small reddish rugose seeds; small oblongate yellow seeds.
(J.H.M.)—The seeds are those of *Oxalis corniculata*, L. (Sour Sorrel) and a native legume (?).

Sericornis maculata. (M. 586; H. 205.) Spotted Scrub Wren.
Port Adelaide, 19th May, 1910.
A number of very small shells and their fragments; several small narrow yellowish seeds; some fragments of insects and (?) grubs; some vegetable fragments.
(W.W.F.)—Cutworms (*Agrotis* sp.).
(J.H.M.)—The seeds are grass-seeds, probably a species of *Eragrostis*.
(C. Hedley, Australian Museum)—The shells are *Assiminca tasmanica*, Tenn. Woods.

Malurus cyaneus. (M. 592.) Blue Wren.
Flinders Island, Bass Straits, 21st November, 1912.
Beetles and numerous insect remains.
(W.B.G.)—Fragments of at least two species of spider; several portions of ants (*Formicidæ*); weevil (*Merimnetes* sp.?); other beetle and insect fragments.

Malurus cyanochlamys. (M. 593; H. 117.) Blue Wren.
(a) Neutral Bay, Sydney, 2nd November, 1911.
Fragments of insects, some metallic.
(W.W.F.)—Fragments of fly (*Trypetidæ*?) and some unrecognisable fragments.

(b) Ourimbah, 18th November, 1911.
Remains of beetles, &c.; some small kidney-shaped seeds.
(W.W.F.)—Fragments of beetles; a small ant (*Iridomyrmex* sp.); fragment of bug's wing, &c.
(J.H.M.)—*Rubus* sp.? (*Rosaceæ*), probably *R. rosifolius*, a native raspberry.

(c) Orange, N.S.W., 13th July, 1909.
Numerous elytra of small beetles (?).
(W.W.F.)—Remains of ants (*Ectatomma metallicum*); elytra of small chrysomelid beetles.

(d) Orange, N.S.W., 13th July, 1909.
Numerous fragments of small beetles (?).
(W.W.F.)—Remains of small beetles and ants.

(e) Port Adelaide, 19th May, 1910.
Numerous remains of beetles, &c.
(W.W.F.)—Heads of plant bugs; wing covers of beetles.

(f) Port Adelaide, 19th May, 1910.
Numerous remains of beetles, &c.
(W.W.F.)—Nothing definite; two small cocoons.

Malurus melanotus, Gould. (M. 595; H. 119.) Black-backed Wren.

(a) Overland Corner, South Australia, 2nd December, 1913.
(E.W.F.)—Insect remains—Coleoptera, elytron of weevil; Hemiptera, heads and other remains.

(b) Overland Corner, South Australia, 2nd December, 1913.
(E.W.F.)—Insect remains—Portions of weevil. Seeds—one small rounded seed.
(J.H.M.)—*Chenopodium*, sp.

Malurus lamberti. (M. 602; H. 125.) Variegated Wren.

Hawkesbury River, 26th October, 1909.
Broken fragments of beetles.
(W.W.F.)—Remains of small beetles.

Malurus assimilis. (M. 603.)

(a) Alawoona, South Australia, 6th December, 1913.
Insect remains—Unrecognisable.

(b) Alawoona, South Australia, 5th December, 1913.
(E.W.F.)—Insects remains.—Portions of beetles (*Chrysomelidæ?*); otherwise unrecognisable.

Stipiturus malachurus. (M. 610; H. 174.) Emu Wren.

(a) Sydney, 3rd October, 1910.
Portions of insects; a long green leg of an insect.
(W.W.F.)—Remains of green mantis; wing covers of small lamellicorn beetles; elytra of Heteromera (beetles).

(b) Middle Harbour, Sydney, 15th April, 1911.
Fragments of insects.
(W.W.F.)—Small Homoptera and a few beetle remains.

(c) Middle Harbour, 15th April, 1911.
Fragments of insects.
(W.W.F.)—Insect remains too indefinite to determine, but probably beetles and some Homoptera.

Artamus melanops. (M. 631; H. 395.) Black-faced Wood-swallow.

Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Fragments of beetles and Hemiptera.

Artamus tenebrosus. (M. 634; H. 398.) Wood-swallow.

(a) Narrabeen, N.S.W., 26th March, 1910.
Remains of beetles and other insects; some small seeds.
(W.W.F.)—Elytra and legs of small beetles: heads and remains of small bees; one small fly; bee remains most abundant.
(J.H.M.)—*Cladium* sp. (*Cyperaceæ*), probably *C. mariscus*, R.Br.—a tall coast plant producing seeds in abundance.

(b) Cobar, September, 1911.
Numerous portions of insects—bugs, &c.
(W.W.F.)—Wings of *Thynnidæ* and of Diptera; numerous portions of small plant or shield bugs (*Pentatomidæ—Dictyotus* sp.).

(c) Cobar, September, 1911.
Numerous portions of insects.
(W.W.F.)—Wings of *Thynnidæ* (wasps); wings of flies (Diptera); fragments of plant bugs (*Pentatomidæ—Dictyotus* sp.); portions of larvæ.

(d) Eidsvold, Queensland (Dr. Bancroft).
Numerous remains of small beetles.
(W.W.F.)—These beetles are all chrysomelid beetles of the genus *Paropsis.*

(e) Milson Island, Hawkesbury River, 16th October, 1912.
Full of portions of insects, amongst them a moth.
(W.B.G.)—Noctuid moth, resembling *Agrotis?*; portions of wasp (Hymenoptera).

(f) Upper Manilla, N.S.W. September, 1914.
(E.W.F.)—Fragments of beetles and Hymenoptera; green blow-fly; larva.
(W.W.F.)—Winged ants, syrphid fly and cutworms.

(g) Bibbenluke, N.S.W.
(E.W.F.)—Insect remains—Coleoptera, *Creophilus erythrocephalus* (*Staphylinidæ*); elytron of water beetle (*Hydrophilidæ*).

(h) Canowindra, February, 1915.
(W.W.F.)—Remains of blow-flies (*Calliphora* sp.); a small fossorial wasp.

(i) Mannum, South Australia, 26th November, 1913.
Fledgling, just out of nest.
(E.W.F.)—Insect remains—Coleoptera and Hymenoptera, one wasp almost complete.

(j) Coonabarabran, 29th September, 1914.
(E.W.F.)—Several wasps (Hymenoptera).

Collyriocichla harmonica. (M. 636; H. 68.) Grey Shrike-Thrush.

(a) Sydney, 7th June, 1909.
Elytra, &c., of several insects.
(W.W.F.)—Chrysomelid beetles; remains of grasshopper.

(b) Hawkesbury River, 26th October, 1909.
A large green-with-gold-spots grub, 1 inch long; portion of a grasshopper (carapaces); legs, &c., of several large beetles; several small pale blue eggs.
(W.W.F.)—Caterpillar of large Hawk-moth (*Cæquosa triangularis*); Banksia moth (*Danima banksiæ*); looper caterpillar; beetles—*Elater* sp., *Allecula* sp., and other undeterminable species; remains of grasshopper or locust.

(c) Coonabarabran, 29th September, 1914.
(E.W.F.)—Insect remains, mostly fragmentary and unrecognisable; two pupæ (? Diptera).
(d) Uralla, May-June, 1915.
(W.W.F.)—Moth caterpillar; remains of ants in large numbers—Bulldog Ant (*Myrmecia* sp.), *Camponotus* sp.; remains of Coleoptera and jaws of *Paropsis* beetle.

Collyriocichla superciliosa. (M. 639.)
(a) Pascoe River, N.Q., 12th August, 1913.
(E.W.F.)—Insect remains—elytra of beetle.
(b) Claudie River, N.Q., 26th September, 1913.
(E.W.F.)—Insect remains—head of weevil. One seed capsule.
(c) Claudie River, N.Q., 29th September, 1913.
(E.W.F.)—Insect remains—Chitinous jaws (? Orthopterous); heads and portions of elytra of Hemiptera. Small bones, ? lizard. Small seed capsule.
(d) Claudie River, N.Q., 23rd October, 1913.
(E.W.F.)—Insect remains—Elytra of beetles (including chrysomelid beetle); head of weevil; insect egg cases.
(e) Claudie River, N.Q., 23rd October, 1913.
(E.W.F.)—Remains of insects; portions of beetles; insect egg case. (?) Seeds—Whitish bodies in semi-gelatinous matrix.

Grallina picata. (M. 646; H. 67.) Magpie Lark.
(a) Eidsvold, Queensland (Dr. Bancroft).
Several small beetles and remains of insects; some small yellow grass-like seeds; a small brown one; a larger brown one.
(W.W.F.)—Small weevils; remains of spiders; small lepidopterous larvæ; other small beetles. I have, on the Murray, watched a peewit (magpie lark) bring fourteen large grasshoppers (plague locusts) to her nestlings in half an hour.
(J.H.M.)—Seeds of *Eriochloa polystachya*, H.B. and K. (a grass allied to *Panicum*); seeds of *Setaria* (or perhaps *Panicum*); the large brown seed-like body seems to be a cocoon—it is hollow, and has a circular large hole on one end.
(b) Sydney, 7th June, 1909.
Some brown pieces of maize seed; two seeds of wheat; one small fly; several small beetles, almost complete; many fragments of insects.
(W.W.F.)—Fragments of wheat and maize; remains of beetles and small flies; green-head ant.
(c) Rowena, near Collarenebri, November, 1910.
Small beetles and portions of other insects.
(W.W.F.)—Plague locusts (*Chortoicetes terminifera*); ground-feeding beetles.
(d) Queensland.
Three kinds of seeds—(1) Narrow black, (2) rounded black, (3) oval yellow; portion of a grasshopper and other insects.
(E.M.)—(1) Insect egg cases; (2) a legume; (3) grass, *Setaria*, probably *S. glauca* (3 mm. long).
(W.W.F.)—Weevil and other beetles; a long-horned grasshopper.
(e) Canowindra, February, 1915.
(W.W.F.)—Remains of beetles and small ants, much broken up; caterpillar; carab beetle; grain of wheat.

(f) Canowindra, February, 1915.
(W.W.F.)—Remains of ants and beetles, small and broken up; a grub (lamellicorn); broken grain of wheat.

Gymnorhina tibicen. (M. 647; H. 243.) Black-backed Magpie.

(a) Berry, N.S.W., 21st May, 1909.
(W.W.F.)—Wheat and plant remains; several ground beetles; green-head ants (*Ectatomma metallicum*).

(b) Sydney, 2nd March, 1910.
(W.W.F.)—Dipterous larvæ; one cutworm; two small grubs; ground spider; remains of a number of locusts and grasshoppers—chief food, locusts and grasshoppers.

(c) Berry, 9th August, 1910.
Stomach full of remains of insects, amongst them a number of small black beetles.
(W.W.F.)—Remains of small heteromerous beetles, small ground weevils, and a few carabid beetles—chiefly fragments of beetles.

(d) Bowral, April, 1910.
Numerous portions of large insects.
(W.W.F.)—Remains of bull-dog ants, *Myrmecia* sp.; legs of grasshopper; remains of small ground beetles, *Anoplognathus* sp. and other *Scarabæidæ*.

(e) Hawkesbury River, 13th August, 1910.
(G. P. Darnell-Smith)—Two soldier-ants; one wild fig.

(f) Upper Manilla, September, 1914.
(E.W.F.)—Numerous insect remains; fragments of beetles chiefly scarabs and weevils, including (?) *Sosytelus* sp.

(g) Walgett, September, 1914.
(E.W.F.)—Small beetles (*Carabidæ*); a mycterid weevil (*Bubaris* sp.); grasshopper remnants; other insect remains unrecognisable.
(W.W.F.)—Remains of grasshoppers, heads of carabs and Heteromera, and ground curculio.

(h) Tarcoon, 23rd October, 1914.
(E.W.F.)—Insect remains; fragments of beetles; heads of ants; otherwise unrecognisable.

Gymnorhina leuconota. (M. 650; H. 244.) White-backed Magpie.

(a) Uralla, May-June, 1915.
(W.W.F.)—Almost all remains of Coleoptera—several heads of weevils; remains of Heteromera; portion of a scarab beetle (*Onthophagus*) head of chrysomelid beetle (*Paropsis* sp.); heads of black bulldog ants (*Myrmecia* sp.), and remains of smaller ants; partly digested grains of wheat and other vegetable matter.

(b) Uralla, May-June, 1915.
(W.W.F.)—Remains of Coleoptera—head of scarab beetle (*Onthophagus*); heads and elytra of weevils (*Curculionidæ*); remains of Heteromera; remains of black bulldog ants (*Myrmecia* sp.); several legs and prothorax of *Locustidæ*. The greater portion of the stomach of this bird consisted of partly digested wheat grains.

Cracticus nigrigularis. (M. 654; H. 248.) Black-throated Butcher-bird.

Uralla, May-June, 1915.
(W.W.F.)—Two immature grasshoppers (*Locustidæ*) only.

Cracticus destructor. (M. 658; H. 252.) Butcher-bird.

(a) Eidsvold, Queensland.
Remains of insects; several elongated kidney-shaped "seeds," yellowish brown to black.
(W.W.F.)—Beetle remains, earwig, and wings of Orthoptera.
(E.M.)—Not seeds; eggs of insects.

(b) Eidsvold, Queensland.
Portions of grasshoppers and beetles.
(W.W.F.)—Large mantis; chrysomelid beetles (*Paropsis* sp.); cockroach; heteromerous beetles; other beetle remains.

(c) Eidsvold, Queensland.
Remains of grasshoppers; large brown seeds.
(W.W.F.)—Brown moth (*Noctuidæ*).
(E.M.)—*Geijera* seeds (see M. 7; H. 567), black testa gone.

(d) Hawkesbury River, 29th June, 1911.
Smell of bugs; one large bug and many remains of insects.
(W.W.F.)—Green plant bug (Hemiptera—*Cuspicona* sp.); wings of flies; beetle remains.

(e) Tarcoon, N.S.W., October, 1914.
(E.W.F.)—Insect remains—portion of a grasshopper; legs of beetles; otherwise unrecognisable.

Falcunculus frontatus. (M. 660; H. 256.) Yellow-bellied Shrike-tit.

Tamworth, 30th October, 1909.
Many fragments of insects; metallic elytra of beetles.
(W.W.F.)—Remains of lamellicorn beetles; remains of chrysomelid beetles.

Oreoica cristata. (M. 662; H. 258.) Bell-bird.

Coonalpyn, South Australia.
Fragments of insects; a grain of wheat.
(W.W.F.)—Some grains of wheat; ants (*Camponotus* sp.); remains of small beetles.

Kempiella kempi.

(a) Claudie River, N.Q., 9th October, 1913.
(E.W.F.)—Fragments of insects; portion of beetle.

(b) Claudie River, N.Q., 9th October, 1913.
(E W.F.)—Insect fragments; remains of ants and beetle.

Pachycephala pectoralis. (M. 667; H. 265.) White-throated Thickhead.

(a) Hawkesbury River, 13th June, 1909.
Two larvæ of saw-flies; remains of a large grasshopper (?).
(W.W.F.)—Chiefly saw-fly larvæ—*Perga* sp. (three specimens); *Pterogophorus* sp.

(b) Hallett's Cove, near Adelaide, May, 1910.
Portions of large beetles.
(W.W.F.)—Remains of ants, earwig, and beetles.

(c) Hawkesbury River, 6th August, 1910.
(G. P. Darnell-Smith)—Insects; insect larvæ; one spider.

(d) Hawkesbury River, 6th August, 1910.
(G. P. Darnell-Smith)—Small seeds.

(e) Hawkesbury River, 13th August, 1910.
(G. P. Darnell-Smith)—Insects.

(f) Uralla, May-June, 1915.
(W.W.F.)—Remains of ants, generally red bulldog ant (*Myrmecia* sp.), *Camponotus* sp.; elytron of weevil; egg capsule of small cockroach.

(g) Uralla, May-June, 1915.
(W.W.F.)—Remains of beetles in large quantities; red bulldog ant; black bulldog ant; egg capsules of small cockroach; egg of phasmid.

Pachycephala rufiventris. (M. 674; H. 271.) Rufous-breasted Thickhead.

(a) Hawkesbury River, 26th October, 1909.
Metallic-tinted fragments of beetles; two hymenopterous (? dipterous) insects.
(W.W.F.)—Wing case of *Stigmodera* sp. (Coleoptera); chrysomelid and ground beetles (Coleoptera); small frog-hopper (Homoptera).

(b) Tamworth, 20th October, 1909.
Many fragments of beetles; a small fly, or hymenopterous insect; a bug (?); a pupa or grub (?).
(W.W.F.)—Beetle remains: Chiefly small Heteromera, found among foliage; saw no grub or fly in this stomach.

(c) Hawkesbury River, January, 1910.
Portions of insects; empty seed vessel of a plant.
(W.W.F.)—Spiders, two species; homopterous insects (*Cercopidæ*); head, body, and damaged wings of weevil beetles; small plant bugs—food obtained upon low shrubs, probably eucalyptus.

(d) Hawkesbury River, 20th November, 1909.
Fragments of beetles and other insects.
(W.W.F.)—Nearly all remains of beetles; small Homoptera.

(e) Queensland.
About eight rounded mottled seeds; portions of a grasshopper (?), &c.
(E.M.)—The seeds are *Geijera* (see M. 7; H. 567); mottled appearance due to unequal wearing of testa.
(W.W.F.)—Remains of long-horned grasshopper; a few insect remains.

(f) Queensland.
Most of a large grasshopper, and other fragments; one brownish " seed.
(W.W.F.)—Green grasshopper (*Cadicia valida*); other insect remains.
(E.M.)—Not a seed, but an egg case (chitinous).

(g) Eidsvold, Queensland (Dr. Bancroft).
Portion of a large grub.
(W.W.F.)—Lepidopterous larva (moth grub).

(h) Ourimbah, 18th November, 1911.
Portions of insects.
(W.W.F.)—Wing, head, and legs of beetles, including a weevil (*Curculionidæ*); numerous non-distinguishable insect parts.

(i) Willbriggie, 7th October, 1912.
Numerous minute fragments of insects; several beetles.
(W.B.G.)—Weevil (*Desiantha* sp.); part of carab wing cover; ant's head (*Formicidæ*).

Pachycephala gilberti. (M. 676; H. 273.) Gilbert's Thickhead.

Murray Flats.
Some round black seeds and smaller yellow ones.
(E.M.)—*Geijera* (see M. 7; H. 567); smaller yellow ones are the cotyledons, &c., set free from the hard enclosing testas.

Eopsaltria australis. (M. 683; H. 252.) Yellow-breasted Shrike Robin.

(a) Sydney, 8th May, 1909.

An ant; a small beetle; some fragments of insects; fifteen oval reddish seeds, a little smaller than wheat seeds.

(W.W.F.)—Chief food, green-head ants (*Ectatomma metallicum*).

(J.H.M.)—The seeds are those of a *Leucopogon*, probably; they are certainly from an epacridaceous plant.

(b) Sydney.

(W.W.F.)—Chiefly the remains of the green-head ant (*Ectatomma metallicum*).

(c) Middle Harbour, Sydney, 1st August, 1910.

Bull-dog ant; remains of small beetle; numerous other insect remains.

(W.W.F.)—Chief food, ants of various species; bull-dog ant (*Myrmecia gulosa*); wood ant (*Polyrhachis* sp.); green-head ant (*Ectatomma metallicum*); moth caterpillar and wing cover of beetle.

(d) Hawkesbury River.

Beetles and other insects.

(W.W.F.)—Yellow cicada (Homoptera); chrysomelid beetle (metallic *Calomela*).

(e) Molong, N.S.W.

Insect remains: Unrecognisable.

Eopsaltria chrysorrhoa. (M. 684; H. 259.) Yellow-breasted Robin.

Queensland.

Fragments of beetles; one rounded rough brown seed.

(W.W.F.)—Chiefly spiders; a few beetle remains.

(E.M.)—*Geijera* (see M. 7; H. 567)—black testa gone.

Aphelocephala leucopsis. (M. 689; H. 239.) White-faced Titmouse.

(a) Hallett's Cove, near Adelaide, 20th May, 1910.

Numerous fragments of beetles, &c.; portion of a seed and some chlorophyll—containing vegetable fragments; a little sand.

(W.W.F.)—Remains of wing covers and legs of beetles.

(b) Murray Flats, South Australia.

Fragments of seeds, amongst them some elongated orange ones and some fragments like wheat.

(E.M.)—All grains of wheat in various stages of digestion and preservation.

(c) Murray Flats.

Fragments of seeds, amongst them one grain of wheat and about a dozen orange-coloured seeds.

(E.M.)—All wheat grains.

(d) Mannum, South Australia, 26th November, 1913.

(E.W.F.)—Insect remains: Unrecognisable.

(e) Gular, 30th October, 1911.

Some fragments of insects; a number of minute reddish-brown seeds; a few minute black ones.

(W.W.F.)—Undeterminable fragments of insects, &c.

(f) Gular, 30th October, 1911.

Fragments of insects; several elongated orange seeds, and some minute brownish ones.

(W.W.F.)—Several pupæ of flies (*Drosophilidæ*) and some unrecognisable insect parts, &c.

(g) Narrabri, January, 1912.
Portions of beetles, &c.; about ten elongated orange-coloured seeds; several oval white ones.
(W.W.F.)—Remains of Coleoptera.
(J.H.M.)—Three different seeds were found in this parcel, which I have marked A, B, C. B. consisted of *Carduus lanceolatus*, Linn. (*Compositæ*).

(h) Willbriggie, N.S.W., 7th October, 1912.
Several elongated orange seeds; one small orange seed; occasional minute fragments of insects.

(i) Belaringar, N.S.W., 20th March, 1915.
(E.W.F.)—Seeds, (1) Small, elongate, light brown; (2) Minute, round, black or dark brown.
Minute insect fragments.

Neositta chrysoptera. (M. 694; F. 286.) Orange-winged Tree-runner.
(a) Milson Island, Hawkesbury River, June, 1912 (7.30 a.m.).
Fragments of beetles, &c.
(W.W.F.)—Remains of spider and a very small brown beetle.

(b) Gunnedah, February, 1911.
Fragments of insects.
(W.W.F.)—Remains of beetles (Coleoptera); larva of moth.

Neositta leucocephala. (M. 695; H. 287.) White-headed Tree-runner.
Eidsvold, Queensland (Dr. Bancroft).
Fragments of insects.
(W.W.F.)—Small grasshopper; remains of froghoppers (Homoptera); a few remains of beetles.

Neositta pileata. (M. 697; H. 289.) Black-capped Tree-runner.
(a) Murray Flats, S.A.
Small beetles; a grub, &c.
(W.W.F.)—Small leaf-hoppers, *Cercopidæ* (Homoptera); a few beetle remains—among them one click beetle, mostly taken under bark.

(b) Murray Flats, S.A.
Small beetles, grub, &c.
(W.W.F.)—Click beetle, ants, froghoppers (*Fulgoridæ*), small heteromerous beetle—all probably taken on tree-trunk.

Climacteris picumna. (M. 704; H. 281.) White-throated Tree-creeper.
(a) Narrabeen, 26th March, 1910.
Smell of ants; fragments of insects; (?) ants' "eggs."
(W.W.F.)—Chief food remains are ants of several species, with a few remains of elytra of small beetles; I see no ant eggs (larvæ?)

(b) Mount Lofty, Adelaide, 17th May, 1910.
Large portions of several beetles and numerous fragments of insects.
(W.W.F.)—Remains of one of the ground weevils.

(c) Bowral, April, 1910.
Numerous remains of beetles, &c.
(W.W.F.)—Ants and wing covers of small ground beetles.

(d) Tent Hill, Northern New South Wales, 16th December, 1910.
Portions of insects.
(W.W.F.)—Pupa of cicada, small moths, and remains of bark-haunting beetles.

(e) Murray Flats.
Fragments of insects; some minute vegetable fragments.
(W.W.F.)—Nearly all remains of ants; a few beetle remains.

(f) Molong, New South Wales.
(E.W.F.)—Remains of ants: *Ectatomma metallicum* and *E. socius*.

(g) Narrabri, New South Wales, January, 1912.
Stomach (size of cherry) full of insect remains, many apparently ants.
(W.W.F.)—Remains of ants (*Ectatomma metallicum*—greenheads, and *Iridomyrmex* sp.).

Climacteris scandens. (M. 705; H. 282.) Brown Tree-creeper.

(a) Locksley, February, 1911.
Fragments of beetles.
(W.W.F.)—A small *Mutilla* sp. (wasp); several ants; beetles, apparently belonging to species found on tree trunks.

(b) Eidsvold, Queensland (Dr. Bancroft).
Full of insect remains.
(W.W.F.)—Nearly all ants (*Formicidæ*); a few beetle remains.

(c) Canowindra, February, 1915.
(W.W.F.)—Remains of small black ants (*Iridomyrmex rufoniger*).

(d) Canowindra, February, 1915.
(W.W.F.)—The whole stomach packed with remains of small black ant (*Iridomyrmex rufoniger*).

(e) Above Morgan, Murray River, South Australia, 30th November, 1913.
(E.W.F.)—Insect remains: Larva; numerous remains of ants, including *Ectatomma socius*.

Zosterops gouldi. (M. 709; H. 303.) Green-backed Silver-eye.
September, 1909, Perth.
Some fragments of insects; part of a large grub (?); some fragments of green vegetable matter.
(W.W.F.)—Beetle remains; various insect remains.

Zosterops cærulescens. (M. 712; H. 301.) Silver Eye.

(a) Middle Harbour, Sydney, 5th February, 1910.
Stomach stained a crimson-lake; remains of blackberries; wings of insects.
(W.W.F.)—Wings of the Passion-vine Froghopper (*Scolypopa* (*Pochazia*) *australis*).

(b) Middle Harbour, Sydney, 2nd April, 1910.
Fragments of insects; a minute reddish seed.
(W.W.F.)—Two lepidopterous larvæ; part of wing of fly and a few fragments of beetle wings.

(c) Middle Harbour, 2nd April, 1910.
Fragments of insects and seeds; some minute grains of quartz.
(W.W.F.)—Remains of very small spider.

(d) Middle Harbour, Sydney, 6th August, 1910.
Portion of a grub and small spider.
(W.W.F.)—Wings of *Psylla*; small jumping spider; looper caterpillar; and remains of small lace wings (Neuroptera).

(e) Middle Harbour, Sydney, 6th August, 1910.
Portion of a grub; several minute coral-pink oval eggs.
(W.W.F.)—Small moth grub; other remains indefinite.

(f) Mt. Lofty, Adelaide, 17th May, 1910.
A few fragments of beetles and other small insects.
(W.W.F.)—Several small moth caterpillars and a beetle.

(g) Mt. Lofty, Adelaide, 17th May, 1910.
Legs of yellowish spider (?); about half-dozen whitish grubs, about half inch long.
(W.W.F.)—Small caterpillars and a spider.

(h) Middle Harbour, Sydney, 11th June, 1910.
Some insect remains; stomach nearly full of small flowers.
(W.W.F.)—Small caterpillar or moth; a number of thrips; a staphylinid beetle and remains of small beetles; all these insects probably captured on the flowers.
(J.H.M.)—See (i).

(i) Middle Harbour, Sydney, 11th June, 1910.
Some insect remains; stomach nearly full of small flowers.
(W.W.F.)—Insect remains few and indefinite; only two or three fragments of beetles.
(J.H.M.)—Flowers of *Leucopogon*, identical with those of (h).

(j) Middle Harbour, Sydney, 11th June, 1910.
Some insect remains; stomach nearly full of small flowers.
(W.W.F.)—Wing covers of small beetles, and legs of a spider probably taken on the flowers.
(J.H.M.)—Flowers of the *Leucopogon*, identical with those of (i).

(k) Middle Harbour, Sydney, 11th June, 1910.
Stomach stained a deep purple; intestinal contents deep purple; portion of an insect; pale yellowish skins of some fruit.
(W.W.F.)—Remains of one beetle.
(J.H.M.)—Skins of the Ink-berry (*Phytolacca octandra*, L.)—the note that the stomach was stained a deep purple gave me the hint as to the origin of the skin, and I find that the stain is identical with that of berries in this herbarium.

(l) Neutral Bay, Sydney, 19th October, 1910.
Vegetable fragments, apparently of a berry; a few minute fragments of insects.

(m) Queensland.
Fragments of beetles; a yellow seed.
(W.W.F.)—Remains of small beetles.
(E.M.)—The "yellow seed" is an insect egg—a round smooth case with a yellow mass of yolk.

(n) Middle Harbour, Sydney, 24th June, 1911.
Fragments of insects, amongst them a small beetle; some fragments of vegetable tissue and two smallish dull-green oval seeds (? *Exocarpus*).
(W.W.F.)—A small weevil, mainly remains of a very small brown weevil; hardly anything else, except this beetle.
(E.M.)—Seeds of some legume.

(o) Middle Harbour, Sydney, 24th June, 1911.
Fragments of insects; skin of caterpillar.
(W.W.F.)—Mites; Hawk-moth larvæ; a number of small caterpillars; remains of aphids.

(p) Mt. Irvine, N.S.W.
Seeds—Black, round, flattened, nitid seeds present in stomach and intestines.
(J.H.M.)—*Phytolacca octandra*, L.

(q) Sydney, 4th November, 1911.
Two grubs; remains of purple-tinted fruit.
(W.W.F.)—Two moth caterpillars (fragmentary); portion of head of weevil (*Curculionidæ*).

(r) Sydney, 25th June, 1912.
Two pepper-tree berries with pink rind off; five small Diptera (?).
(W.W.F.)—Five small midges (fam. *Chironomidæ*).

(s) Sydney, 26th June, 1912.
Portions of a fruit; one small fly.
(W.W.F.)—Small midge (fam. *Chironomidæ*).
(J.H.M.)—Portions of succulent exocarp of *Persoonia* sp. (*Proteaceæ*).

(t) Sydney, 26th June, 1912.
Portions of fruits; a few remnants of insects.
(W.W.F.)—Remains of small flies (Diptera?).
(J.H.M.)—Portions of exocarp of *Persoonia* sp. (*Proteaceæ*).

(u) Sydney, 26th June, 1912.
Portions of fruits; a few remnants of insects.
(J.H.M.)—Membraneous skin of exocarp, with succulent matter attached, of *Persoonia* sp. (*Proteaceæ*).

(v) Sydney, 7th July, 1912.
Two pepper-tree berries.
(J.H.M.)—*Schinus molle*, Linn.

(w) Sydney, 7th July, 1912.
Fruits.
(J.H.M.)—Seeds of *Phytolacca octandra*, Linn. (*Phytolaccæ*); two different seeds which I have marked A and B.

(x) Sydney, 10th July, 1912.
One pepper-tree berry.

(y) Sydney, 20th November, 1911.
A few insect remains; vegetable fragments.
(W.W.F.)—Remains of parasitic wasp (*Braconidæ*); larva of moth.
(J.H.M.)—Fragments of flowers and one seed of *Leucopogon* sp. (*Epacrideæ*).

(z) Ourimbah, 18th November, 1911.
Stomach dyed purple; small seeds in a purplish pulp (? fig).
(J.H.M.)—*Rubus* sp.? (*Rosaceæ*), probably *R. rosifolius*, a native raspberry.

(aa, ab, ac) Sydney, 6th August, 1912.
Fruits with small black seeds.
(J.H.M.)—*Phytolacca octandra, L.*

(ad) Sydney, 6th August, 1912.
A pepper tree berry.

(ae) Sydney, 6th August, 1912.
Fruit with small seed.
(J.H.M.)—*Solanum nigrum*, L.

(af) Flinders Island, Bass Straits, 22nd November, 1912.
Seeds, with portion of fruits.
(J.H.M.)—*Leucopogon* sp.

Dicæum hirundinaceum. (M. 722; H. 375.) Mistletoe Bird.

Hawkesbury River, 23rd March, 1912.

Fragments of insects in stomach; mistletoe fruit (*Loranthus* sp.) in lower intestine.

(W.W.F.)—Remains of five small spiders.

Pardalotus ornatus. (M. 723; H. 376.) Striated Pardalote.

(a) Near Morgan, Murray River, South Australia, 29th November, 1913.

(E.W.F.)—Insect remains, &c.: Mainly unrecognisable, heads of ants (? *E. metallicum*).

(b) Alawoona, South Australia, December, 1913.

(E.W.F.)—Insect remains: Portion of beetle.

Pardalotus affinis. (M. 725; H. 378.) Yellow-tipped Pardalote.

Flinders Island, Bass Straits, 25th November, 1912.

(E.W.F.)—Insect remains: Beetle elytra, including *Paropsis* sp. (*Chrysomelidæ*).

Pardalotus sp. (*affinis* or *punctatus*).

Flinders Island, Bass Straits, 27th November, 1912.

Full of fragments of insects, including metallic elytra of beetles.

(W.B.G.)—*Fulgoridæ* (one specimen); various fragments of small beetles.

Pardalotus punctatus. (M. 726; H. 379.) Spotted Pardalote.

(a) Gular, 30th October, 1911.

Fragments of insects.

(W.W.F.)—One moth; many non-determinable fragments of insects.

(b) Hawkesbury River, 23rd March, 1912.

Metallic fragments of beetles, &c.

(W.W.F.)—Remains of Coleoptera, and wing of braconid wasp.

(c) Eidsvold, Queensland (Dr. Bancroft).

Fragments of insects.

(W.W.F.)—Remains of small plant bugs (Homoptera); a few beetle legs and wings.

(d) Hawkesbury River, N.S.W., 11th June, 1909.

Fragments of small beetles, &c.

(W.W.F.)—One thrips; beetle remains; floating scales may be those of aphis.

(e) Hawkesbury River, N.S.W., 11th June, 1909.

Small fragments of insects.

(W.W.F.)—Undefinable; oil and scales suggest that the bird had been feeding upon cutworm moths (*Agrotis* sp.) or aphis.

(f) Jindabyne, N.S.W., 12th December, 1910.

Minutely comminuted fragments of a metallic beetle.

(W.W.F.)—Remains of wing covers of Coleoptera.

(g) Queensland.

Fragments of beetles, lerp-scales (?).

(W.W.F.)—Remains of small chrysomelid beetles (chiefly).

Pardalotus xanthopygius, McCoy. (M. 727; H. 380.) Yellow-rumped Pardalote.

Mannum, South Australia, 26th November, 1913.

(E.W.F.)—Insect remains: Mostly unrecognisable, remains of beetles.

Pardalotus melanocephalus. (M. 729; H. 312.) Black-headed Pardalote.

(a) Eidsvold, Queensland.
Fragments of insects and spiders.
(W.W.F.)—Remains of beetles, and a few larvæ perhaps of Diptera.

(b) Eidsvold, Queensland.
Fragments of insects; some lerp-scales (?).
(W.W.F.)—Beetle remains (*Chrysomelidæ*).

(c) Eidsvold, Queensland.
Fragments of insects; some white lerp-scales (?); several minute yellow seeds.
(W.W.F.)—Indefinite remains of small beetles.
(E.M.)—The seeds are eggs of an insect about 1 mm. long.

(d) Eidsvold, Queensland.
Part of a grub; fragments of beetles, &c.
(W.W.F.)—Chrysomelid beetles (*Cadmus* and *Cryptocephalus*; fam. *Chrysomelidæ*); moth caterpillar.

(e) Eidsvold, Queensland.
Fragments of beetles, &c.
(W.W.F.)—Small chrysomelid beetle; a membracid and other Homoptera.

(f) Eidsvold, Queensland.
Fragments of beetles, &c.
(W.W.F.)—Remains of beetle, but nothing definite.

(g) Eidsvold, Queensland.
Fragments of insects; skins of grubs (?); one small yellow seed.
(W.W.F.)—A looper caterpillar; beetle-remains very indefinite.
(E.M.)—The seed is the egg of an insect 1·5 mm. long, a white chitinous case with a yellowish-green embryo visible through it.

(h) Eidsvold, Queensland.
Fragments of insects.
(W.W.F.)—Insect remains—nothing definite; a few bits of beetles.

Melithreptus atricapillus. (M. 733; H. 307.) Lunulated Honey-eater.

(a) Sydney, 24th July, 1909.
Wings, elytra, antennæ, &c., of insects—many fragments.
(W.W.F.)—Thrips; remains of elytra of ground beetles.

(b) Sydney, 24th July.
Wings, antennæ, and many insect remains; a small fly.
(W.W.F.)—Some perfect specimens of thrips; Diptera, several species; beetles.

(c) Sydney, 4th November, 1911.
A few fragments of insects.

(d) Milson Island, Hawkesbury River, 29th June, 1912.
Fragments of beetles and other insects (? a small cockroach).
(W.W.F.)—Numerous fragments of beetles, including part of a very small weevil.

(e) Milson Island.
Insect fragments, apparently of beetles.
(W.W.F.)—*Thrips* sp., and *Aphis* sp.; remains of small beetles.

Melithreptus gularis. (M. 737; H. 310.) Black-chinned Honey-eater.

Queensland.
Fragments of insects; portion of a grub (?).
(W.W.F.)—Beetle and dipterous remains.

Melithreptus brevirostris. (M. 741; H. 313.) Short-billed Honey-eater.

(a) Sydney, 21st August, 1909.
A grub; fragments of insects' bodies and wings.
(W.W.F.)—Larva of moth and remains of ground beetles.

(b) Sydney, 8th May, 1909.
(W.W.F.)—Jaws of spider; remains of beetle larvæ.

(c) 2nd April, 1909.
(W.W.F.)—Larva of lamellicorn beetle.

(d) Sydney, 15th October, 1909.
A few insect remains; (?) part of a spider.
(W.W.F.)—Coleoptera.

(e) Middle Harbour, 28th March, 1910.
Several small grubs; remains of a small brownish spider with a number of small white young ones.
(W.W.F.)—Six spiders of different species—a number of small ones, probably on the back of one of the adult spiders when eaten; head of a froghopper (Homoptera); a number of lepidopterous larvæ of various moths. This is, by the contents of its stomach, one of our good insectivorous birds.

(f) Coonalpyn, South Australia.
Fragments of insects.
(W.W.F.)—Remains of beetles and several small moth larvæ.

(g) Mannum, South Australia, 26th November, 1913.
(E.W.F.)—Insect remains—unrecognisable.

(h) Mannum, South Australia, 26th November, 1913.
(E.W.F.)—Insect remains—elytra of beetle.

(i) Milson Island, Hawkesbury River, 16th June, 1912.
Fragments of insects; portions of green caterpillar; a smell of Eucalyptus in the stomach.
(W.W.F.)—Remains of *Psyllidæ*; small beetle; moth caterpillar; fly maggot; remains of spider.

Melithreptus affinis. (M. 7442.)
Flinders Island, Bass Straits, 25th November, 1914.
(E.W.F.)—Insect remains—elytra of beetles; otherwise unrecognisable.

Plectrorhamphus lanceolatus. (M. 745; H. 316.) Striped Honey-eater.

(a) Queensland.
A mass of vegetable hairs; some fragments of insects.
(W.W.F.)—Remains of small caterpillar.

(b) Queensland.
Three round black seeds.
(E.M.)—*Geijera.* (See M. 7; H. 567.)

Myzomela nigra, Gould. (M. 748; H. 296.) Black Honey-eater.
Molong, N.S.W.
(E.W.F.)—Insect remains—Coleoptera (*Arthicus* sp. [2]); hymenopterous remains.

Acanthorhynchus tenuirostris. (M. 752; H. 299.) Spine-billed Honey-eater.

(a) Sydney, 8th May, 1909.
(W.W.F.)—Chiefly the remains of house flies (*Musca domestica* or *Musca corvina*).

(b) Hawkesbury River, December, 1909.
Small fragments of insects.
(W.W.F.)—Many of the fragments are the bits of wing covers of small homopterous insects—a few beetles and two ants.
(c) Mount Lofty, Adelaide, 17th May, 1910.
A few small fragments of insects.
(W.W.F.)—Nothing definite in beetle remains.
(d) Hawkesbury River, 3rd October, 1910.
A large hymenopterous insect.
(W.W.F.)—Chiefly remains of dung beetles (*Onthophagus* sp.); also remains of wasp (? *Thynnus*, flower-wasp).

Glycyphila melanops. (M. 756; H. 317.) Tawny-crowned Honey-eater.
(a) Middle Harbour, 9th April, 1910.
Two small Hymenoptera; remains of other insects.
(W.W.F.)—Two braconid wasps (*Braconidæ*) and the remains of a number of small flies (*Diptera*).
(b) Fledgling. Sydney, September, 1912.
Full of portions of insects.
(W.B.G.)—Fragments of integument of Hymenoptera—Aculeata, either ant or solitary wasp fragments.

Glycyphila albifrons, Gould. (M. 757; H. 318.) White-fronted Honey-eater.
(a) Overland Corner, Murray River, South Australia, 2nd December, 1913.
(E.W.F.)—Insect remains—elytra of beetles; heads of Hemiptera; remains of ants.
(b) Overland Corner, Murray River, South Australia, 2nd December, 1913.
(E.W.F.)—Insect remains—mainly unrecognisable; Hemiptera heads.

Meliphaga phrygia. (M. 764; H. 327.) Warty-faced Honey-eater.
Hawkesbury River, N.S.W., 3rd April, 1909.
Stomach full of elytra, legs, &c., of beetles.

Stigmatops ocularis. (M. 765; H. 320.) Brown Honey-eater.
Perth, September, 1909.
A few fragments of insects (wings, &c.).
(W.W.F.)—Chiefly remains of small Diptera; a few fragments of beetles; small Homoptera.

Ptilotis fusca. (M. 769; H. 328.) Fuscous Honey-eater.
(a) Murray Flats.
Fragments of insects.
(W.W.F.)—Insect remains, wing of fly (Diptera).
(b) Queensland.
Fragments of beetles, &c.
(W.W.F.)—Beetle and ant remains.
(c) Queensland.
Fragments of beetles, &c.
(W.W.F.)—Remains of very small Coleoptera.
(d) Queensland.
Fragments of beetles, &c.
(W.W.F.)—Remains of ants and few beetles.

(e) Queensland.
Fragments of beetles, &c.; a few (?) lerp scales.
(W.W.F.)—Remains of ants and some wings of bees.

(f) Queensland.
Fragments of beetles; a few (?) lerp scales.
(W.W.F.)—Beetle remains more plentiful, also ant remains.

(g) Queensland.
Fragments of insects.

(h) Queensland.
Fragments of beetles, &c.
(W.W.F.)—Small beetle and other ant remains; wings of Neuroptera.

(i) Queensland.
Fragments of beetles, &c.
(W.W.F.)—Beetle and ant remains.

(j) Queensland.
Fragments of beetles, &c.
(W.W.F.)—Chiefly remains of small beetles.

(k) Queensland.
Fragments of beetles.
(W.W.F.)—Remains of beetles and flies.

(l) Wellington, N.S.W., November, 1914.
(E.W.F.)—Insect remains—fragments of insects, portions of chrysomelid beetle.

(m) Wellington, N.S.W., November, 1914.
(E.W.F.)—Insect remains—portions of beetles, otherwise unrecognisable.

(n) Molong, N.S.W.
(E.W.F.)—Insect remains—fragments of weevils (*Curculionidæ*).

Ptilotis chrysotis. (M. 770; H. 329.) Yellow-eared Honey-eater.

(a) Ourimbah, 18th November, 1911.
Stomach dyed purple; small seeds (? fig); part of ladybird.
(W.W.F.)—Apparently portion of ladybird's (*Leis*) elytra.
(J.H.M.)—*Rubus* sp. ? (*Rosaceæ*), probably *R. rosifolius*, a native raspberry.

(b) Sydney District.
One blue berry; two *Solanum nigrum* fruits.
(J.H.M.)—*Elæocarpus* sp. (*Tiliaceæ*) seeds; *Solanum nigrum*, Linn. (*Solanaceæ*).

(c) Hawkesbury River, New South Wales, 12th June, 1909.
A fleshy purple fruit.
(J.H.M.)—Fruit of *Phytolacca decandra*, Linn. (Red-ink Plant).

(d) Hawkesbury River, 20th December, 1909.
Some fragments of insects; a number of small kidney-shaped seeds, sculptured with pits.
(W.W.F.)—Remains of Coleoptera. Are not the seeds those of trefoil clover?

(e) Hawkesbury River, December, 1909.
Some fragments of insects; some small kidney-shaped seeds, reddish brown, in a reddish brown matrix.
(W.W.F.)—Remains of two spiders; several ants; the head and broken elytra of small beetle.

(f) Hawkesbury River, 6th April, 1910.
Stomach stained purple; a number of large purplish seeds.
(J.H.M.)—*Stephania hernandifolia* (*Menispermaceæ*)—I failed to identify the purple fruits which stained the stomach; amongst this fruit was a single but unmistakable seed of *Stephania hernandifolia*, a slender vine very common on sandy sea-coasts.

Ptilotis sonora. (M. 772; H. 334.) Singing Honey-eater.

(a) Tailem Bend, South Australia, May, 1910.
Numerous portions of ants and other insects; two seeds surrounded by white fluffy " flesh " (on section, show green cotyledons).
(W.W.F.)—Ants chiefly; remains of several moths.
(J.H.M.)—Vegetable remains not recognisable.

(b) Murray Flats, near Blanchetown, South Australia, May, 1911.
Purplish fruits of a saltbush (?), small black seeds and an oval yellow larger one.
(E.M.)—Seeds of *Kochia*; purplish-coloured seeds are *Enchylæna tomentosa*, R.Br. (N. O. *Chenopodiaceæ*)—all saltbush with membrane in various stages of preservation; large yellow one has most of membrane present.

(c) Mannum, South Australia, 26th November, 1914.
(E.W.F.)—Insect remains—Grasshopper—jaws, wings, and legs; other remains, hymenopterous and coleopterous. Seeds—Large, round seeds, like *Exocarpus*.
(J.H.M.)—*Exocarpus stricta*, R.Br.

(d) Cobar, September, 1911.
A few fragments of insects' legs; several large brownish seeds.
(J.H.M.)—*Geijera parviflora*, Lindl (?) (*Rutaceæ*).

Ptilotis chrysops. (M. 775; H. 336.) Yellow-faced Honey-eater.

(a) Milson Island, Hawkesbury River, 29th June, 1912.
Fragments of beetles, &c.
(W.W.F.)—Fragments of Coleoptera.

(b) Sydney, 24th April, 1909.
(W.W.F.)—Remains of Diptera (one *Culicidæ*, *Culex* sp.; one *Muscidæ*.)

(c) Sydney, 24th July, 1909.
A few fragments of insects.
(W.W.F.)—Remains of flies and beetles.

(d) Sydney, 3rd April, 1909.
Beetle bodies.

(e) Milson Island, Hawkesbury River, 28th November, 1914.
(E.W.F.)—Seeds—(1) Brownish, small, ovate; (2) yellow, minute, ovate; (3) one black nitid seed.
(W.M.C.)—Seeds—(1) Not determined; (2) *Physalis pemorana* (Cape gooseberry); (3) *Phytolacca octandra* (Ink berry).

(f) Kurrajong Heights.
Portions of beetles.
(W.B.G.)—Particles of small beetles and of a beetle larva.

(g) Hawkesbury River, 29th May, 1915.
(E.W.F.)—Insect remains—Small Hymenoptera; otherwise unrecognisable.

Ptilotis flavicollis. (M. 776; H. 338.) Yellow-throated Honey-eater.

(a) Flinders Island, Bass Straits, 27th November, 1912.
Remains of elytra of beetles.
(W.B.G.)—*Paropsis* sp. (*Chrysomelidæ*); fragment of small pupa (probably moth) and a few other insect remains; plant seeds.
(J.H.M.)—The seeds are of *Leucopogon* sp.

(b) Flinders Island, Bass Straits, 22nd November, 1912.
Full of fragments of insects.
(W.B.G.)—Parts of a spider; indeterminable fragments of insects.

Ptilotis leucotis. (M. 778; H. 339.) White-eared Honey-eater.

(a) Hawkesbury River, N.S.W., 12th June, 1909.
A beetle case; some remains of other insects.
(W.W.F.)—Chrysomelid beetle; heads of small ants.

(b) Hawkesbury River, N.S.W., 26th October, 1909.
Fragments of beetles; three eggs like ant eggs.
(W.W.F.)—Fragments of beetles.

(c) Middle Harbour, 28th March, 1910.
Fragments of insects.
(W.W.F.)—Remains of wing covers of small beetles, probably obtained in the flowers of the eucalypts—all the honey-eaters are known to feed upon the small insects they find when sucking up the honey of the flowers, but are only insectivorous in a minor degree.

(d) Milson Island, Hawkesbury River, 16th June, 1912.
Fragments of beetles and insects; a number of small vegetable fibres.
(W.W.F.)—Legs of cercopid (froghopper); legs of native bee.

Ptilotis melanops. (M. 781; H. 342.) Yellow-tufted Honey-eater.

(a) Fragments of insects, chiefly beetles.
(W.W.F.)—Remains of Hymenoptera.

(b) Molong, N.S.W.
(E.W.F.)—Insect remains—Elytra of beetles (*Diphucephala* sp.?); head of weevil (?*Auletes*).

(c) ——— 4th April, 1913.
(E.W.F.)—Insect remains—Unrecognisable.

(d) Hawkesbury River, N.S.W., 3rd April, 1909.
Beetles.

(e) Middle Harbour, 1st August, 1910.
Some minute fragments of insects.
(W.W.F.)—Insect remains small and indefinite; only some wings of aphids can be determined.

Ptilotis cratitia. (M. 783; H. 344.) Wattle-cheeked Honey-eater.

Coonalpyn, South Australia.
Fragments of insects.
(W.W.F.)—Nearly all ant remains; a number of winged forms.

Ptilotis ornata. (M. 786; H. 348.) Yellow-plumed Honey-eater.

(a) Mannum, South Australia, 26th November, 1913.
(E.W.F.)—Insect remains—Unrecognisable.

(b) Blanchetown, South Australia, 27th November, 1913.
(E.W.F.)—Insect remains—Unrecognisable fragments; legs of beetle.

(c) Alawoona, South Australia, December, 1913.
(E.W.F.)—Insect remains—Portions of small weevils.

(d) Monarto South, South Australia, July, 1914.
(E.W.F.)—Insect remains—Fragments of beetles; portions of Hymenoptera.

Ptilotis plumula. (M. 787; H. 349.) Yellow-fronted (Plumed) Honey-eater.
Perth, September, 1909.
Some fragments of insects and case of small beetle.
(W.W.F.)—Also remains of spider.

Ptilotis penicillata. (M. 791; H. 346.) White-plumed Honey-eater.
(a) Murray Flats, S.A.
Minute fragments of insects.
(W.W.F.)—Very minute insect fragments; ants and Homoptera.
(b) Orange, N.S.W., 13th July, 1909.
Numerous fragments of insects.
(W.W.F.)—Insects' remains; nothing distinctive except fragments of beetles.
(c) Near Morgan, South Australia, 29th November, 1913.
(E.W.F.)—Insect remains—Probably hymenopterous.
(d) Near Morgan, South Australia, 29th November, 1913.
(E.W.F.)—Numerous insect remains, mostly unrecognisable; remains of three wasps.
(e) Overland Corner, South Australia, 2nd December, 1913.
(E.W.F.)—Insect remains—Portion of weevil, heads of Hemiptera.
(f) Canowindra, February, 1915.
(W.W.F.)—Small green shield plant bugs like *Cuspicona* sp.; a few ant and beetle remains.
(g) Canowindra, February, 1915.
(W.W.F.)—Four specimens of Devil's Coach-horse beetles (*Creophilus erythrocephalus*); three ants (*Iridomyrmex gratiosa*); remains of two plant bugs; also beetles and ants.

Meliornis pyrrhoptera. (M. 797; H. 353.) Crescent Honey-eater.
(a) Mount Lofty, Adelaide, 17th May, 1910.
A few small fragments of insects.
(W.W.F.)—Nothing definite; a few fragments of the wing covers of beetles.
(b) Mount Lofty Range, Adelaide, 23rd May, 1910.
A few small fragments of insects; some minute fragments of green vegetable matter.
(W.W.F.)—Remains of beetles.
(c) Adelaide, South Australia.
Fragments of insects.
(W.W.F.)—Chiefly dipterous remains.
(d) Flinders Island, Bass Straits, November, 1912.
(E.W.F.)—Insect remains; unrecognisable.

Meliornis novæ-hollandiæ. (M. 799; H. 354.) New Holland Honey-eater.
(a) Sydney, 24th April, 1909.
(W.W.F.)—Remains of two flies (Diptera)—appear to have been *Syrphidæ*.
(b) Sydney, 2nd August, 1909.
Wings and part of body of large fly (?); some other remains of insects.
(W.W.F.)—Chiefly remains of various species of flies.

(c) Hawkesbury River, 20th November, 1909.
Small fragments of insects.
(W.W.F.)—Chiefly remains of wings of small flies (Diptera) and small ichneumon wasps; a few elytra of beetles.
(d) Middle Harbour, 9th April, 1910.
An anthomyid fly; fragments of many other insects.
(W.W.F.)—An almost perfect specimen of small fly and wings of several others.
(e) Middle Harbour, 16th July, 1910.
Portions of small gnats (?).
(W.W.F.)—Remains of very small flies (Diptera).
(f) Middle Harbour, Sydney, 1st August, 1910.
A small hymenopterous insect; remains of other insects.
(W.W.F.)—Remains of small flies (Diptera); wing covers of beetles.
(g) Middle Harbour, Sydney, 1st August, 1910.
Stomach full of minute fragments of insects, amongst them a small hymenopterous insect.
(W.W.F.)—Nearly all the remains consist of small midges and mosquitoes.
(h) Middle Harbour, Sydney, 6th August, 1910.
A small gnat.
(W.W.F.)—All the insect remains indefinite, with the exception of a bundle of legs of gnats.
(i) Mount Lofty Range, Adelaide, 23rd May, 1910.
Numerous portions of small beetles, &c.
(W.W.F.)—Remains of ants, and wing covers of beetles.
(j) Young bird, Coonalpyn, South Australia.
Minute fragments of insects.
(W.W.F.)—Insect remains; nothing definite.
(k) Coonalpyn, South Australia.
Portions of insects.
(W.W.F.)—Nearly all remains of white ants (*Termitidæ*).

Meliornis sericea. (M. 801; H. 356.) White-cheeked Honey-eater.
(a) Sydney, 24th April, 1909.
(W.W.F.)—The remains of several flies (Diptera), much decomposed—species appear to belong to family *Muscidæ*.
(b) Middle Harbour, Sydney, 28th March, 1910.
Remains of insects.
(W.W.F.)—Remains of wings of small flies (Diptera); a few bits of beetle wings.
(c) Middle Harbour, 16th July, 1910.
Several flies (Diptera).
(W.W.F.)—Two small moths; remains of muscid flies.

Myzantha garrula. (M. 804; H. 306.) Noisy Minah.
(a) Orange, N.S.W., 13th July, 1909.
A few fragments of insects (legs, elytra, &c.).
(W.W.F.)—Remains of beetles (*Heteromera*, &c.).
(b) Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Insect remains—Beetle elytra (*Carabidæ*); otherwise unrecognisable.
(c) Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Insect remains—Fragmentary, mostly unrecognisable, a few fragments of beetle elytra.

(d) Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Insect remains—Head of ant; otherwise fragmentary and unrecognisable.

(e) Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Insect remains—A few unrecognisable fragments.

(f) Upper Manilla, September, 1914.
(E.W.F.)—Insect remains—Mostly unrecognisable; portions of beetles (*Elateridæ*).

(g) Milson Island, Hawkesbury River.
Stomach full of insect fragments, chiefly beetles.
(W.W.F.)—Remains of Hymenoptera; ants (*Formicidæ*); parasitic wasps (*Braconidæ*); heads of scarabæid beetles.

(h) Eidsvold, Queensland, (Dr. Bancroft).
Fragments of insects.
(W.W.F.)—Remains of small heteromerous beetles, probably taken on the foliage.

(i) Eidsvold (Dr. Bancroft).
A large grub; fragments of beetles, &c.
(W.W.F.)—Same kind of beetle remains as in (h); also a few ground beetles, and a large lepidopterous larva.

(j) Eidsvold (Dr. Bancroft).
Portions of insects; fragments of a large beetle.
(W.W.F.)—Remains of small beetles; head and thorax of click beetle (*Monocrepidius* sp.).

(k) Canowindra, February, 1915.
(W.W.F.)—Clover seed (1); one small beetle; number of green shield plant bugs (*Cuspicona* sp.).

(l) Canowindra, February, 1915.
(W.W.F.)—Green plant bugs; two small green caterpillars; a beetle larva.

(m) Young bird. Swan Reach, Murray River, S.A., 27th November, 1913.
(E.W.F.)—Insect remains—Mostly unrecognisable; head of Hymenopteron.

(n) Belaringar, N.S.W., 14th April, 1915.
(E.W.F.)—Insect fragments—Small ants; pupa case of moth; otherwise unrecognisable. Seeds—A few small round reddish seeds.

(o) Belaringar, N.S.W., 14th April, 1915.
(E.W.F.)—Insect remains—Large ant; elytron of beetle (*Laius* sp. fam. *Malacodermidæ*); otherwise fragments unrecognisable. Seeds—Small round reddish seeds.

(p) Hawkesbury River, 29th May, 1915.
(E.W.F.)—Insect remains—Small weevil (*Cryptorrhynchides*); fragments of other beetles.

(q) Belaringar, N.S.W., 15th May, 1915.
(E.W.F.)—Numerous ants, apparently all of one species and including winged forms.
(W.W.F.)—Almost all remains of ants *Pheidole* sp., including winged forms; remains of a spider.

(r) Uralla, May-June, 1915.
(W.W.F.)—Remains of ants generally—*Camponotus nigriceps, Polyrhachis* sp., *Myrmecia* sp.; remains of Coleoptera; heads of weevils; head of *Bembex* wasp.

(s) Uralla, May-June, 1915.

(W.W.F.)—Remains of spiders generally; two small weevils (*Curculionidæ*); elytra of other small beetles; remains of ants. A small seed.

(t) Uralla, May-June, 1915.

(W.W.F.)—Remains of ants and small beetles only.

NOTE.—The Soldier Bird is very common in the Uralla District, and usually feeds among the leaves and bark of the Eucalypts. It also does considerable damage to fruit in the small orchard at Salisbury Court, and often came into the tent and fed upon pieces of bread, meat, &c., which were thrown it.—Blow-fly Investigations Camp, Uralla.

Myzantha flavigula. (M. 806; H. 361.) Yellow-throated Minah.

(a) Moree, 5th October, 1909.

Fragments of beetles and other insects; remains of grubs; several small yellowish kidney-shaped seeds.

(W.W.F.)—(1) Crane fly (*Tipulidæ*-Diptera); (2) Remains of cutworms (*Agrotis* sp.); (3) Beetles (Heteromera).

(b) Tarcoon, N.S.W., October, 1914.

(E.W.F.)—Insect remains—Fragmentary; portions of beetles, otherwise unrecognisable.

(c) Belaringar, N.S.W., 14th April, 1915.

(E.W.F.)—Insect remains—Hymenoptera—Small bee; small ants; numerous specimens of a small wasp. Diptera—*Bombylidæ*, one specimen; *Muscidæ*, several specimens of a metallic green fly. Coleoptera—One small beetle (*Chrysomelidæ*). Numerous small round reddish seeds.

(W.W.F.)—Hymenoptera—Thirty specimens of a yellow ichneumon (*Braconidæ*); forty ants, *Iridomyrmex* (*Formicidæ*); one bee, Diptera—one Bombylid fly; eight muscid flies. Homoptera—one psyllid larva. Coleoptera—one beetle, *Cadmus* (*Chrysomelidæ*). Broken fragments of insects, vegetable matter, and about fifty-eight small round seeds.

(d) Belaringar, N.S.W., 15th May, 1915.

(E.W.F.)—Numerous ants, apparently all of one species, and including winged forms.

(W.W.F.)—Almost all remains of ants, *Pheidole* sp., including winged forms; elytra of small beetle (*Curculionidæ*). Several small seeds.

Anthochæra carunculata. (M. 808; H. 363.) Red-wattle Bird.

Jindabyne, N.S.W., 12th December, 1910.

Stomach full of metallic fragments of a beetle.

(W.W.F.)—Remains of Coleoptera, apparently wing cases of small metallic lamellicorn on wattle trees (*Diphucephala* sp.).

Anellobia chrysoptera. (M. 810; H. 365.) Brush Wattle Bird.

Middle Harbour, 8th March, 1910.

Some fragments of beetles.

(W.W.F.)—Remains of heads and elytra of beetles; the fangs of several spiders.

Acanthochæra rufigularis. (M. 812; H. 367.) Spiny-cheeked Honey-eater.

(a) Cobar, September, 1911.
Fragments of insects; about a dozen large brownish seeds.
(W.W.F.)—Undeterminable; head of Hymenopteron (?).

(b) Overland Corner, South Australia, 2nd December, 1913.
(E.W.F.)—Insect remains: Head (?Hymenopterous). Seeds—Moderate sized, round, brownish, like *Exocarpus*.
(J.H.M.)—*Exocarpus stricta*, R.Br.

Entomyza cyanotis. (M. 813; H. 368.) Blue-faced Honey-eater.

(a) Queensland.
Chiefly fragments of fruit or seeds; a few insect remains.
(E.M.)—Pieces of shell, effervesce with acid; wax, soluble in ether—nothing else distinguishable.
(W.W.F.)—Lepidopterous larva; remains of Diptera and beetle remains.

(b) Mannum, South Australia, 26th November, 1913.
(E.W.F.)—Bones of small lizard (?)—tibiæ, femora, and vertebræ. Insect remains: Coleoptera—*Prypnus* sp. (*Curculionidæ*); *Chalcopterus* sp. (*Tenebrionidæ*); *Phoracantha* sp. (*Cerambycidæ*); mandibles of grasshopper (Orthoptera).

Tropidorhynchus corniculatus. (M. 816; H. 370.) Leatherhead.

(a) Gular, 30th October, 1911.
Portion of a grasshopper (?) and fragments of insects; one black seed.
(W.W.F.)—Two moths (*Arctiidæ* ?); winged ant (*Dolichoderinæ*); scraps of a beetle; callipers of an earwig.

(b) Hawkesbury River, N.S.W., 3rd April, 1909.
One dipterous insect; seeds.

(c) Hawkesbury River, 29th May, 1915.
(E.W.F.)—A few fragments of insects; head of ant.

Philemon citreogularis. (M. 819; H. 373.) Yellow-throated Friar Bird.

Eidsvold, Queensland.
Remains of insects; several rounded dark-brown seeds.
(W.W.F.)—*Coleoptera* remains; apparently ground beetles (lamellicorn).
(E.M.)—*Geijera.* (See M. 7; H. 567.)

Anthus australis. (M. 822; H. 390.) Ground Lark.

(a) Bathurst, January, 1910.
Fragments of beetles; wings, &c., of insects; a small grass seed.
(W.W.F.)—Ants (*Formicidæ*); Heteromerous beetle; ladybird beetle (*Coccinella*); small carab beetle; more ants than beetles.

(b) Summit of Mount Kosciusko, 10th December, 1910.
Fragments of insects.
(W.W.F.)—Remains of ground-hunting spiders, with a few wing cases of beetles.

Ægintha temporalis. (M. 838; H. 412.) Red-browed Finch.

(a) Narrabeen, 26th March, 1910.
Small, oval, white seeds.

(b) Middle Harbour, Sydney, 9th April, 1910.
Fragments of small, white seeds.

(c) Middle Harbour, Sydney, 9th April, 1910.
Fragments of small, white seeds.

(d) and (e) Berry, 10th August, 1910.
A number of small, whitish seeds and minute orange or brown seeds.
(J.H.M.)—Three small kinds of seeds, probably all grasses; the narrow seed is probably an *Eragrostis*, but I cannot give the genus of the other two.

(f) and (g) Berry, 10th August, 1910.
A number of small seeds as in (d) and (e).
(J.H.M.)—The same three seeds as in (d) and (e); in addition, another small, flat seed, which is not a grass, and belongs to the Dicotyledoneæ.

(h) Gosford, 24th May, 1915.
(E.W.F.)—Crop contents: Small, oval, whitish and greenish seeds.
(W.M.C.)—The seeds are *Panicum* sp., and *Panicum sanguinale*, L. (Summer Grass).

(i) Gosford, 24th May, 1915.
(E.W.F.)—Crop contents: Small, oval, whitish and greenish seeds; a larger brown seed; small black seeds, one nitid, one rugulose.
(W.M.C.)—The seeds are *Panicum* sp., *Panicum sanguinale*, L. (Summer Grass), *Geranium* sp., and black seeds not identified.

(j) Gosford, 24th May, 1915.
(E.W.F.)—Crop contents: Small whitish seeds.
(W.M.C.)—The seeds are *Panicum* sp., *Panicum sanguinale*, L. (Summer Grass) and *Panicum crusgalli* (Ditch millet).

(k) Gosford, 24th May, 1915.
(E.W.F.)—Crop contents: small whitish seeds.
(W.M.C.)—The seeds are *Panicum* sp., and *Panicum sanguinale*, L. (Summer Grass).

Oriolus sagittarius. (M. 850; H. 62.) Oriole.

(a) Hawkesbury River, N.S.W., 3rd April, 1909.
Exocarpus (?) fruits; red seeds.

(b) Berry, 10th August, 1910.
A seed like a small date seed; portions of large grub.
(W.W.F.)—Looper caterpillar (fam. *Geometridæ*).
(J.H.M.)—Stone of the white cedar, *Melia azedarach*, Linn.

(c) Queensland.
A number of dark brown seeds.
(E.M.)—*Geijera.* (See M. 7; H. 567.)

(d) Queensland.
Several oval black seeds; several white cedar fruits.
(E.M.)—*Geijera.* (See M. 7; H. 567.) *Melia azedarach*, Linn.

(e) Queensland.
Some purplish tinted fruit with an elongated brown seed.
(E.M.)—(?)

(f) Queensland.
Many oval, black seeds.
(E.M.)—*Geijera.* (See M. 7; H. 567.)

(g) Eidsvold, Queensland (Dr. Bancroft).
Minute, round, black seeds; an ant; remains of a grub (?).
(W.W.F.)—Lepidopterous larva, cutworm; other caterpillars; an ant; beetle remains.
(J.H.M.)—Seeds of an *Amaranthus*, probably *A. viridis*, Linn.

Sphecotheres maxillaris. (M. 852; H. 62.) Fig Bird.
Queensland.
About eight fruits of white cedar.
(E.M.)—*Melia azedarach*, Linn.

Chibia bracteata. (M. 854; H. 66.) Drongo.
(a) Numerous large fragments of insects.
(W.W.F.)—Wings of Orthoptera (grasshopper); heads of longicorn beetle; other beetle remains.

(b) Eidsvold, Queensland (Dr. Bancroft).
Several crickets (?).
(W.W.F.)—This bottle was broken, but wrapped up I found no crickets, but in the remains are some nearly perfect specimens of our large paper-nest wasp (*Polistes tasmaniensis*).

Ælurœdus maculosus. (M. 860; H. 165.) Spotted Cat-bird.
Pascoe River, N.Q., 7th August, 1913.
Seeds—Large, kidney-shaped, brown, smooth.
(J.H.M.)—*Sideroxylon* sp.

Chlamydodera maculata. (M. 861; H. 167.) Spotted Bower-bird.
(a) Queensland.
Many black seeds; some legs of insects.
(E.M.)—*Geijera.* (See M. 7; H. 567.)

(b) Queensland.
Three white cedar berries.
(E.M.)—*Melia azedarach*, Linn.; some fragments of insect wings.

(c) Queensland.
Four white cedar berries; one orange fruit.
(E.M.)—White cedar, *Melia azedarach*, Linn.

(d) Queensland.
Two white cedar berries.
(E.M.)—*Melia azedarach*, Linn.

(e) Queensland.
Four white cedar berries.
(E.M.)—*Melia azedarach*, Linn.

Craspedophora alberti. (M. 870; H. 58.) Albert Rifle-bird.
(a) Claudie River, N.Q., 8th October, 1913.
(E.W.F.)—Insect remains: Elytra of heteromerous beetle (*Chalcopterus* sp.). Seeds—one large oval flattened black seed.

(b) Claudie River, N.Q., 9th October, 1913.
(E.W.F.)—Four large ovate stones or seeds.

(c) Claudie River, N.Q., 20th October, 1913.
(E.W.F.)—Large orange-coloured mass in three parts (? fruit); vegetable cells seen under microscope.

Corvus coronoides. (M. 872; H. 44.) Crow.

(a) Rowena, near Collarenebri, N.S.W., November, 1910.
A number of maggots, with remains of dead sheep.
(W.W.F.)—Maggots of *Calliphora rufifacies*—one of the blow-flies that infest wool; beetles and ants.

(b) Jindabyne, N.S.W., 12th December, 1910.
Stomach full of comminuted fragments of grasshoppers.
(W.W.F.)—Tail-bones of a lamb; beetle remains; remains of locusts (grasshoppers).

(c) Jindabyne, N.S.W., 12th December, 1910.
Stomach crammed full of maroon-coloured fragments of grasshoppers.
(W.W.F.)—Apparently this bird has been feeding on locusts (grasshoppers); hardly any other food.

(d) Pascoe River, N.Q., 7th August, 1913.
(E.W.F.)—Masses of ant remains, a yellow-coloured species with large jaws.

(e) Pascoe River, N.Q., 8th August, 1913.
(E.W.F.)—Insect remains: Grasshopper.

(f) Upper Manilla, September, 1913.
(E.W.F.)—Dark mass (?carrion); larval skins; pupa cases (Lepidoptera); Hymenoptera, wingless species.
(W.W.F.)—Cutworms, and a number of moth pupæ.

(g) Moree, N.S.W., October, 1914.
(E.W.F.)—Vegetable fragments; fibres apparently of vegetable origin; pieces of twigs; grass stems; burrs (? clover); larvæ (?Lepidoptera).
(W.M.C.)—Burrs and seeds of *Medicago denticulata* (common trefoil).

(h) Moree, N.S.W., October, 1914.
(E.W.F.)—Stomach filled with whitish granular masses, with hard chitinous fragments, apparently of a small crustacean.

(i) Merah North, October, 1914.
(E.W.F.)—Large mass of meat, which appears to have been cooked.

(j) Merah North, October, 1914.
(E.W.F.)—Stomach contents few, chiefly an amorphous granular material; a few insect remains (beetles).

(k) Yanco, 19th December, 1914.
(E.W.F.)—Wheat and oat grains.

(l) Walgett, September, 1914.
(E.W.F.)—Chitinous fragments of legs (? of grasshopper); remains of black pupa case. Fibrous material (? grass).
(W.W.F.)—Elytra of small plant bug; remains of a small moth pupa; vegetable matter and remains of an egg.

(m) Walgett, September, 1914.
(E.W.F.)—Carrion (? decomposing meat); remains of grasshoppers.
(W.W.F.)—Grasshoppers.

(n) Tarcoon, October, 1914.
(E.W.F.—Wheat grains, almost filling stomach; portion of bones; larva (? Lepidoptera); leg of beetle.

(o) Tarcoon, 23rd October, 1914.
(E.W.F.)—Large mass composed of fibres of wool; a few twigs; portion of tissue of animal origin, probably portion of carrion.

(p) Coonabarabran, 29th September, 1914.
(E.W.F.)—Vegetable shreds (?). Insect remains: *Talaurinus* sp. (*Amycterides*)—beetle.

(q) Belaringar, N.S.W., 20th March, 1915.
(E.W.F.)—Insect remains: Grasshopper; beetles—*Talaurinus* sp. (*Amycterides*); larvæ. Seeds: Burrs. Small bones.
(W.W.F.)—All that we received were the pupal cases of muscid flies, which were apparently dry and empty when eaten by the birds; remains of a grasshopper.

(r) Belaringar, N.S.W., 3rd June, 1915.
(E.W.F.)—Mainly carrion, with a few small bones. Pupal cases of muscid fly, and a few remains of ants.
(W.W.F.)—Remains of a small ant like *Ectatomma*; parts of pupal cases of blowfly *Calliphora* sp.; remains of a centipede.

(s) Belaringar, N.S.W., 3rd June, 1915.
(E.W.F.)—Mainly carrion, with a few fragments of bones. Remains of ants. Small yellow seeds.
(W.W.F.)—Remains of ants, *Pheidole* sp., only.
(J.H.M.)—The seeds are those of *Atriplex semibaccatum*, R.Br. (Salt-bush).

(t) Belaringar, N.S.W., 3rd June, 1915.
(E.W.F.)—Mainly carrion. Larval heads; larval skin; small beetle.
(W.W.F.)—Remains of centipede; jaws and heads of beetle grubs; elytra of small weevil (*Curculionidæ*).

Strepera versicolor. (M. 878; H. 49.) Grey Crow-Shrike.
Slopes of Mount Kosciusko, 12th December, 1910.
Metallic fragments of a large beetle.
(W.W.F.)—The remains of our Golden Stag Beetle (*Lamprima latrellei*)—it has evidently made its breakfast of these large and very hard-bodied beetles.

Struthidea cinerea. (M. 882; H. 53.) Grey Jumper (Happy Family).
(a) Eidsvold, Queensland (Dr. Bancroft).
Small smooth oval yellow seeds; smaller ribbed oval yellow seeds; some small pieces of red gravel; fragments of an insect.
(W.W.F.)—I would not expect to find many insect remains in the stomachs of these birds—probably the insects are accidentally picked up.
(J.H.M.)—Two species of *Panicum*; the ribbed one is probably a *Setaria*.

(b) Eidsvold, Queensland (Dr. Bancroft).
One moderate-sized oval yellow seed; small smooth oval yellow seeds; smaller ribbed oval yellow seeds; small oval brown seeds; some small pieces of red gravel.
(J.H.M.)—Grass seeds only—two species of *Panicum*; one *Setaria* (or perhaps also a *Panicum*); a single seed of *Stenotaphrum americanum* (buffalo grass); only one seed found is not a grass, and this belongs probably to the *Cyperaceæ*.

(c) Eidsvold, Queensland (Dr. Bancroft).
Same contents as in (b), with the addition of a few minute comminuted fragments of insects.
(J.H.M.)—The same *Panicum* and *Setaria* seeds as in (a) and (b), and some small seeds I cannot identify.

(d) Eidsvold, Queensland (Dr. Bancroft).
Small smooth oval yellow seeds; smaller ribbed oval yellow seeds; some small pieces of red gravel; a few minute comminuted fragments of insects.
(J.H.M.)—*Panicum* and *Setaria* seeds.

(e) Gunnedah, N.S.W.
A number of minute round black seeds, several larger oval yellow ones, and one kidney-shaped brown one; some vegetable fragments and a few fragments of insects (?); grains of red sand.
(J.H.M.)—The oval yellow seeds are *Melilotus*, probably *M. parviflora*, Desf. (Hexham Scent); the numerous small dark seeds are probably a *Chenopodium*, or at least belong to the *Chenopodiaceæ*.

(f) Gunnedah, N.S.W.
A number of slightly elongated wheat grains; vegetable fragments; one small heart-shaped seed, and several small cylindrical reddish orange ones; a few minute yellow seeds, and a few black ones; grains of red sand.
(J.H.M.)—Common wheat grains; numerous grass seeds of a species of *Panicum*, and the same dark seeds of a (?) *Chenopodium* found in (e). I do not recognise the reddish cylindrical seeds.

(g) Gunnedah, N.S.W.
The same contents as in (f), with the addition of a number of orange-coloured seeds.
(J.H.M.)—The wheat and *Panicum* seeds as in (f), and the same dark doubtful *Chenopodium* seeds.

(h) Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Numerous fragments of insects, unrecognisable. Seeds—(1) moderately large ovate yellow; (2) small brownish, oval, pointed at each end.
(W.M.C.)—(1) *Cucumus myriocarpus* (Wild Melon); (2) *Scirpus* sp.; (3) *Setaria viridis* (Pigeon Grass).

(i) Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Insect remains: Fragments of beetles, otherwise unrecognisable. Seeds—moderately large, oblongate, brownish.
(W.M.C.)—(1) Not determined; (2) *Rumex* sp. (Doch.).

(j) Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Mostly shell grit and unrecognisable fragments of insects.

(k) Coonabarabran, 29th September, 1914.
(E.W.F.)—A few fragments of insects. Seeds—(1) medium size, narrow, elongate; (2) small, narrow, elliptical; (3) small, red, with three ridges.

(l) Belaringar, N.S.W., 14th April, 1915.
(E.W.F.)—Seeds—(1) wheat grains; (2) elongate brownish seeds; (3) minute round black seeds.

Corcorax melanorhamphus. (M. 883; H. 54.) White-winged Chough.

(a) Milson Island, Hawkesbury River.

About two dozen small oval brown seeds.

(J.H.M.)—Seeds of *Gahnia psittacorum*, Labill. (*Cyperaceæ*).

(b) Berry, N.S.W., 21st May, 1909.

When shot, discharged a carnation-coloured fluid from anus and mouth, and the abdominal organs were similarly deeply-tinted; this was due to the bird feeding on the fruit of the Red-ink Plant (*Phytolacca decandra*, Linn.).

(W.W.F.)—A cutworm (*Agrotis* sp.); beetles (*Paropsis*) and other beetle remains; a quantity of black seeds.

(c) Queensland.

A large beetle; many other fragments of insects. Seeds—(1) Small yellowish; (2) large oval brown.

(E.M.)—(1) Two *Setaria glauca*; the rest a mixture of grains free from the glumes, and some with glumes which appear to be a species of *Panicum*; (2) ?

(W.W.F.)—Locusts (grasshoppers); Heteromera (ground beetles); spiders.

(d) Portions of large insects—(?) cockroaches; a number of grass seeds.

(W.W.F.)—Large quantity of seeds; remains of heteromerous beetles; two bits of skin-like material—not caterpillars.

(E.M.)—Seeds either *Gramineæ* or *Cyperaceæ*.

(e) Belaringar, Nevertire, N.S.W., 15th May, 1914.

Birds (e) to (i) shot feeding on stack, adjacent to wheat field, the wheat being about 3 to 6 inches above ground.

(E.W.F.)—Quartz pebbles; wheat grains. Insect remains: Heads of weevils (*Brachyderides* ? and *Aterpides* ?).

(f) Belaringar, Nevertire, N.S.W., 15th May, 1914.

(E.W.F.)—Quartz pebbles; wheat grains. Insect remains: Coleoptera—portions of beetles, elytra of harpalid, head of weevil; heads of ants.

(g) Belaringar, Nevertire, N.S.W., 15th May, 1914.

(E.W.F.)—Quartz pebbles; wheat grains. Insect remains: Coleoptera—head and elytra of harpalid (*Carabidæ*); portion of *Formicomus* sp. (*Anthicidæ*); remains of weevil (*Ethemaia* sp.—*Aterpides*); other beetle remains.

(h) Belaringar, Nevertire, N.S.W., 15th May, 1914.

(E.W.F.)—Quartz pebbles; wheat grains. Insect remains: Coleoptera—remains of beetles, portions of weevils (*Brachyderides*? and *Aterpides*?). Seeds—Roughly pentagonal dark seeds, with rugose capsules.

(J.H.M.)—*Enchylæna tomentosa*, R.Br.

(i) Belaringar, Nevertire, N.S.W., 15th May, 1914.

(E.W.F.)—Quartz pebbles; wheat grains. Insect remains: Coleoptera—amycterid weevil (*Bubaris pubescens*); portion of chrysomelid. Seeds—One burst capsule similar to (h).

(j) Gunnedah, N.S.W., September, 1914.

(E.W.F.)—Insect remains: Beetles (*Carenum* sp.; *Tenebrionidæ*; *Elateridæ*; *Curculionidæ*); Orthoptera; larval skins.

(W.W.F.)—Caterpillars of small moth.

(k) Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Earwig (*Forficulidæ*); beetles (Coleoptera); weevils (*Talaurinus alaticornis* and *Mandalotus* sp.); dung beetles (*Orthophagus* sp.—*Scarabæidæ*).

(l) Gunnedah, N.S.W., September, 1914.
(E.W.F.)—Coleoptera—weevils (*Amycterides-Talaurinus alaticornis*, numerous specimens; *Crytorrhynchides*).

(m) Coonabarabran, 29th September, 1914.
(E.W.F.)—Insect remains: Coleoptera (beetles)—*Carenum* sp. (*Carabidæ*); clicks (*Elateridæ*); weevils, *Amorphorrhinus* and *Cubicorrhynchus* (*Amycterides*). Larvæ.
(W.W.F.)—Quantity of remains of small beetles, carabs and heteromera.

(n) Tarcoon, 23rd October, 1914.
(W.W.F.)—Stomach almost empty—a few insect remains (beetles, head of ant); some seeds (?), empty; grit.

(o) Belaringar (Nevertire), N.S.W., 14th April, 1915.
(E.W.F.)—Numerous elongate brownish seeds; some still contained in a black shell. Unrecognisable fragments of insects.

Introduced Birds.

Passer domesticus. Sparrow.

(a) Richmond, New South Wales.
About a dozen very small black seeds; part of a maize (?) seed; fragments of other grains; no insect remains.
(J.H.M.)—Seeds of a plant belonging to *Amarantaceæ*—probably a species of *Amarantus*.

(b) Richmond, New South Wales.
Fragments of grain.

(c) Adelaide, 14th May, 1910.
Several small white seeds.
(J.H.M.)—This seed seems to be identical with *Eragrostis*, found in *Sericornis maculata* (M. 586), Port Adelaide, but is more digested.

(d) Adelaide, 14th May, 1910.
A few fragments of grain, and a number of small pieces of quartz, &c.; gravel.

Sturnus vulgaris. Starling.

(a) Berry, New South Wales, 21st May, 1909.
(W.W.F.)—Remains of one earwig (*Forficulidæ*); one spider; two flies (Diptera); and one beetle (*Chrysomelidæ*).

(b) Wagga Experiment Farm.
(E.W.F.)—Long larval skins, like worms; segments of milliped.
(W.W.F.)—Cutworms.

(c) Wagga Experiment Farm.
(E.W.F.)—Long larval skins, like worms; portions of milliped; remains of beetles (*Elateridæ* and *Carabidæ*).
(W.W.F.)—Small cutworms; fragments of hard caterpillars or millipeds; wings of beetle.

(d) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Worm-like larvæ; remains of milliped; beetle (*Elateridæ*).
(W.W.F.)—Small cutworms; broken chitin; small caterpillars.

(e) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Larvæ; elaterid remnants.
(W.W.F.)—Small cutworms.

(f) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Larvæ; beetles; weevil (*Ethemaia sellata*); ant.
(W.W.F.)—Cutworm caterpillars (*Agrotis* sp.); smaller caterpillars.

(g) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Larvæ; remnants of beetles; fragments of eggshells; pieces of bone.
(W.W.F.)—Cutworms; slender caterpillars and remains of an egg.

(h) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Larvæ.
(W.W.F.)—Cutworm caterpillars (*Agrotis* sp.)

(i) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Larvæ; remnants of beetles; remains of milliped.
(W.W.F.)—Small cutworms.

(j) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Larvæ; remains of beetle (*Promecoderus* sp.).
(W.W.F.)—Cutworm caterpillars (*Agrotis* sp.); two heads of green carabs.

(k) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Larvæ.

(l) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Larvæ; remains of Hemiptera.
(W.W.F.)— Cutworms; slender caterpillars.

(m) Wagga Experiment Farm, August, 1914.
(E.W.F.)—Larval fragments.
(W.W.F.)—Remains of small moths.

(n) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Thick larvæ; some thin larval skins.
(W.W.F.)—Cutworms.

(o) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Thick larvæ and thin larval skins; Hemiptera heads; remains of moth.
(W.W.F.)—Cutworms; remains of moth (*Agrotis* sp.).

(p) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Thick larvæ and thin larval skins; remains of carab (*Promecoderus* sp.).
(W.W.F.)—Cutworms.

(q) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Thick larvæ and thin larval skins; remains of weevil.
(W.W.F.)—Cutworms.

(r) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914
(E.W.F.)—Thick larvæ.
(W.W.F.)—Cutworms.

(s) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Nil, except a long thin filament (? vegetable).
(W.W.F.)—Vegetable matter; portion of moth wing.

(t) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Larval remains; thick larvæ and thin; other insect fragments—Coleoptera and Hemiptera.
(W.W.F.)—Cutworms.

(u) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Numerous small whitish chitinous heads, probably of termites; remains of ant; remains of beetle.
(W.W.F.)—Much digested—great number of heads of small caterpillars.

(v) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Thick larvæ.
(W.W.F)—Cutworms; vegetable matter; elytra of small ground beetle.

(w) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Thick larvæ; thin larval skins.
(W.W.F.)—Cutworms; several small moths.

(x) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914
(E.W.F.)—Thick larvæ.
(W.W.F.)—Cutworms.

(y) Wagga Experiment Farm (vicinity of poultry yards), 19th August, 1914.
(E.W.F.)—Remains of beetles (*Carabidæ*).
(W.W.F.)—Cutworms; remains of carab beetle.

(z) Wagga Experiment Farm, 5th September, 1914.
(E.W.F.)—Thick larval skins (*Lepidoptera*); weevil (*Cubicorrhynchus* ? *maculatus-Amycterides*).
(W.W.F.)—Cutworms.

(aa) Wagga Experiment Farm (eastern end No. 2 grazing paddock), 5th September, 1914.
(E.W.F.)—Thin long larval skins; remains of ants; elytra of beetles.
(W.W.F.)—Cutworms; remains of winged ants.

(ab) Cooma, September, 1914.
(E.W.F.)—Fragments of insects, including portions of elytra of tenebrionid beetle (*Chalcopterus* sp.).

(ac) Cooma, 16th September, 1914.
(E.W.F.)—Fragments of insects; portion of tenebrionid beetle (*Chalcopterus* sp.).

(ad)—Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—Four small locusts (grasshoppers); six small caterpillars; wing case of heteromerous beetle; jaws of mole cricket; a green grasshopper.

(ae) Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—One grain of wheat; remains of small ground beetles (*Carabidæ* and Heteromera); two small grass caterpillars.

(af)—Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—Among the remains a number of small ground beetles: one carab and six Heteromera.

(ag)—Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—Similar to stomach of (af).

(ah) Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—Remains of seven locusts (grasshoppers); a few particles of beetle.

(ai) Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—Grain of wheat; one weevil and some remains of Heteromera.

(aj) Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—Remains of small ground beetles—chiefly Heteromera and Carabidæ.

(ak) Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—Insect remains: Chiefly Coleoptera; remains of weevil; and of a ground spider.

(al) Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—Remains of Coleoptera; Heteromera, weevil and carabs.

(am) Salisbury Court, Uralla, 9th February, 1914 (shot in morning).
(W.W.F.)—Remains of seven locusts (grasshoppers).

(an) Salisbury Court, Uralla, 13th March, 1915 (shot in morning).
(W.W.F.)—Small ground Coleoptera (Heteromera and *Carabidæ*).

(ao) Salisbury Court, Uralla, 13th March, 1915 (shot in morning).
(W.W.F.)—Remains of two ground spiders; four Heteromera; a few other beetle remains; bit of leaf.

(ap) Salisbury Court, Uralla, 13th March, 1915 (shot in morning).
(W.W.F.)—Remains of small ground Coleoptera (Heteromera and *Carabidæ*).

(aq) Salisbury Court, Uralla, 13th March, 1915 (shot in morning).
(W.W.F.)—Carab and heteromerous beetle, nearly perfect; one spider; remains of another spider; wing of grasshopper; remains of cricket.

(ar) Salisbury Court, Uralla, 13th March, 1915 (shot in morning).
(W.W.F.)—Large quantity of remains of small ground beetles (Heteromera and *Carabidæ*); remains of ants; silver-fish; bit of grass.

(as) Canowindra, February, 1914.
(W.W.F.)—Chiefly remains of green plant bugs (*Cuspicona* sp.); a few beetle wings; heads of ants.

(at) Gunnedah, N.S.W., September, 1914 (juvenile).
(E.W.F.)—Numerous insect fragments; portions of beetle elytra; otherwise unrecognisable.

(au) Gunnedah, N.S.W., September, 1914 (juvenile).
(E.W.F.)—Insect remains, chiefly coleopterous—fragments of tenebrionid beetles (*Chalcopterus* sp.).

(av) Gunnedah, N.S.W., September, 1914 (juvenile).
(E.W.F.)—Insect remains, chiefly coleopterous (*Tenebrionidæ*); ants (*Ectatomma*).

(aw) Gunnedah, N.S.W., September, 1914 (juvenile).
(E.W.F.)—Insect remains: Coleoptera; larva.
(W.W.F.)—Small lepidopterous larvæ and pea-grubs.

(ax) Gunnedah, N.S.W., September, 1914 (juvenile).
(E.W.F.)—Insect remains: Chiefly coleopterous fragments.

(ay) Uralla, May-June, 1915.
(W.W.F.)—Large quantity of green clover; fourteen whole grains of wheat and partly digested remains of others; remains of young wheat. Several heads of weevils.

Fringella chloris. Greenfinch.
Narrabeen, New South Wales, 26th March, 1910.
Some small seeds of two kinds; some remains of black seeds.

Reptilia.

Amphibolurus barbatus. Frill Lizard.
Emmaville.
Large portions of hairy grubs, beetles, &c.; part of a centipede (Australian Museum—*Scolopendra morsitans*); a grass-seed, a triangular seed, some fragments (?) seeds, and two small leaves.
(E.M.)—"Grass-seed."—This is not grass-seed, but the calyx with stem and ovary and part of style of a flower, which appears to be one of the *Lobeliaceæ*. The two leaves and seed I cannot identify.

Varanus varius. Monitor "Goanna."
Dubbo, September, 1911.
Numerous cockroaches; mass of rabbits' hairs (microscopically identified).
(W.W.F.)—Fragments of cockroaches; several pupæ of Cyclorrhaphous Diptera.

Lygosoma (*Leiolepisma*) *entrecasteauxii.* Skink.
Flinders Island, Bass Straits, 21st November, 1912.
A grub; a chrysalis; part of a spider (?); insects' remains (?).
(W.B.G.)—Wireworm larva (*Elateridæ*); moth pupa; two small species of spiders.

Amphibians.

Hyla ewingii, D. & B. Frog.
Flinders Island, Bass Straits, 22nd November, 1912.
Several large beetles.
(W.B.G.)—Fragments of beetles, including *Perperus* sp. (*Curculionidæ*) and black *Adelium* sp. (*Tenebrionidæ*).

APPENDIX III.

Tabulated Examinations of the Contents of Stomachs and Crops of the individual Australian Birds, &c., examined by C. T. Musson.

Native Birds.

No.*			Neuroptera, &c.	Orthoptera.	Hymenoptera.	Coleoptera.	Lepidoptera.	Diptera.	Hemiptera.	Vegetable Food.
			c. Centipedes. m. Molluscs. s. Spiders. n. Neuroptera.	l. Locusts and Grasshoppers. o. Other Orthoptera.	s. Sawflies. a. Ants. b. Stinging Hymenoptera. p. Parasitic Hymenoptera.	l. Ladybirds. c. Carabs. b. Other Beetles.	b. Butterflies. m. Moths.	b. Blow-flies. f. Other Flies.	b. Plant Bugs. p. Psyllids. a. Aphides. s. Scale. c. Cicadas.	c. Crop Seed. s. Wild Seed. b. Buds, Leaves, &c. f. Crop Fruit. w. Wild Fruit.
8	*Coturnix pectoralis*, Gld.	Stubble Quail	.....	.....	.....	.....	.....	.....	.....	c 1†
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 2
	,, ,,	,,	.....	.....	.....	.....	m 4	.....	.....	s 3
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 5
	,, ,,	,,	.....	.....	.....	.....	m 4	.....	.....	s 6
	,, ,,	,,	.....	.....	.....	b 7	.....	.....	.....	c 8 b
	,, ,,	,,	.....	.....	.....	.....	.....	.....	b 9	c 10
10	*Excalfactoria australis*, Gld.	King Quail	.....	.....	.....	.....	.....	.....	.....	s 11
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 12
13	*Turnix varia*, Lath.	Painted Quail	.....	o	.....	b	.....	.....	.....	s 13
	,, ,,	,,	.....	.....	a	b	.....	f	.....	c s 14 b w
20	*Lamprotreron superba*, T. & K.	Little Green Pigeon	.....	.....	.....	.....	.....	.....	.....	w
27	*Geopelia tranquilla*, Gld.	Blue-eyed Dove	.....	.....	.....	.....	.....	.....	.....	s 15
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s
28	,, *cuneata*, Lath.	Pink-eyed Dove	.....	.....	.....	.....	.....	.....	.....	s 16
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 17
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 18
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 19
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 20
31	*Phaps elegans*, T. & K.	Brush Bronze Wing	.....	.....	.....	.....	.....	.....	.....	.....
42	*Hypotænidia philippensis*, L.	Pectoral Rail	s	.....	.....	b 21 c 22	.....	.....	.....	.....
	,, ,,	,,	.....	l	.....	b 23	m 24	.....	.....	.....
55	*Porphyrio melanonotus*, Temm.	Red Bill	.....	.....	.....	.....	.....	.....	.....	b 25
56	*Fulica australis*, Gld.	Coot	.....	.....	.....	.....	.....	.....	.....	b 26
57	*Podiceps gularis*, Gld.	Grebe	.....	.....	.....	b 27	.....	.....	b 28	.....
	,, ,,	,,	m 29	.....	.....	.....	.....	.....	.....	s 30

132	*Charadrius fulvus*, Gm.	Golden Plover	m	.....	.....	b	.....	.....	.....	b
	,, ,,	,,	m	.....	.....	b	.....	.....	.....	b
139	*Ægialitis nigrifrons*, Cuv.	Sandpiper	m	.....	.....	b	m	f	.....	b
	,, ,,	,,	.....	.....	.....	b 31 c	.....	.....	.....	.....
142	*Himantopus leucocephalus*, Gld.	White Fronted Stilt	n 33	.....	.....	b 32	.....	.....	.....	.....
150	*Totanus stagnatilis*, Bechs.	Greenshank	n 34	.....	.....	.....	.....	.....	.....	.....
162	*Pisobia acuminata*, Horsf.	Sharp-tailed Stint	.....	.....	a	b	m	.....	.....	b 35
167	*Rhynchæa australis*, Gld.	Painted Snipe	m 36	.....	.....	.....	.....	.....	.....	b
184	*Herodias syrmatophorus*, Gld.	White Crane	.....	.....	.....	b 37	.....	.....	.....	.....
197	*Botaurus pœciloptilus*, Wagl.	Bittern	.....	.....	.....	b 38	.....	.....	.....	b w
240	*Accipiter torquatus*, Vig. & Horsf.	Pigeon Hawk (39)	.....	.....	.....	.....	.....	.....	.....	.....
	,, ,,	,, (40)	.....	.....	.....	.....	.....	.....	.....	.....
252	*Elanus axillaris*, Gld.	Black Shouldered Kite (41, 42, 43, 44, 45).	.....	.....	.....	.....	.....	.....	.....	.....
255	*Falco melanogenys*, Gld.	Black-cheeked Falcon	.....	.....	.....	.....	.....	.....	c	.....
259	*Hieracidea berigora*, V. & H.	Brown Hawk (46)	.....	l 47	.....	b	.....	.....	.....	.....
261	*Cerchneis cenchroides*, V. & H.	Grasshopper Hawk (48)	.....	.....	.....	.....	.....	.....	.....	.....
	,, ,,	,,	.....	l 49	.....	.....	.....	.....	.....	.....
263	*Ninox boobook*, Lath.	Boobook Owl	.....	.....	.....	b 50	.....	.....	.....	.....
265	*Ninox maculata*, V. & H.	Spotted Owl	.....	.....	.....	b	.....	.....	.....	.....
274	*Trichoglossus Swainsoni*, J. & S.	Blue Mountain Lorrikeet	.....	.....	.....	.....	.....	.....	.....	s
290	*Callocephalon galeatum*, Lath.	Gang Gang	.....	.....	.....	.....	.....	.....	.....	s 52
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 53
304	*Platycercus Pennanti*, Lath.	Lowry	.....	.....	.....	.....	.....	.....	.....	s 54
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 55
311	*Platycercus eximius*, Shaw	Rosella	.....	.....	.....	.....	.....	.....	.....	s 56
	,, ,,	,,	.....	.....	.....	b 57	.....	.....	.....	c 58 f
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	c 59
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 60
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	s 61
	,, ,,	,,	.....	.....	.....	.....	.....	f	.....	s 62
	,, ,,	,,	.....	.....	.....	.....	.....	f 63	.....	s 64
333	*Melopsittacus undulatus*, Shaw	Budgerygar	.....	.....	.....	.....	.....	.....	.....	s
337	*Podargus strigoides*, Lath.	Frogmouth	c 67 m 65 s	.....	.....	b 66	.....	.....	.....	.....
341	*Eurystomus pacificus*, Lath.	Dollar Bird	.....	.....	.....	b 68 c 69	m 70	.....	b	.....
	,, ,,	,,	.....	.....	a	b 71	.....	.....	b c	.....
	,, ,,	,,	.....	.....	h 72	b 73	.....	.....	b	.....
345	*Dacelo gigas*, Bodd.	Jackass	c 78 s	l o 75	.....	b 76	.....	.....	.....	b 77
	,, ,,	,,	.....	.....	.....	b 74	.....	.....	.....	.....
349	*Halcyon sanctus*, V. & H.	Forest Kingfisher	.....	.....	.....	b	.....	.....	.....	.....
	,, ,,	,,	.....	l	.....	.....	.....	.....	.....	.....
352	*Merops ornatus*, J.	Bee Eater	.....	.....	a	.....	.....	f 79	.....	.....
	,, ,,	,,	n 80	.....	.....	.....	.....	f 79	.....	.....
	,, ,,	,,	.....	.....	h 80½	b	.....	.....	.....	.....
	,, ,,	,,	.....	.....	h 81	b	b	.....	.....	.....
	,, ,,	,,	.....	.....	h	.....	m	.....	.....	.....
	,, ,,	,,	.....	.....	p h 82	b 83	.....	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m 83½	.....	.....	.....

* Mathews' Hand-list Birds of Australia. "The Emu" Supplement, Vol. XII, January, 1913.

† This series of figures corresponds with that used in the notes to this table beginning on page 108.

APPENDIX III—Native Birds—*continued.*

No.*			Neuroptera, &c.	Orthoptera.	Hymenoptera.	Coleoptera.	Lepidoptera.	Diptera.	Hemiptera.	Vegetable Food.
			c. Centipedes. m. Molluscs. s. Spiders. n. Neuropters.	l. Locusts and Grasshoppers. o. Other Orthoptera.	s. Sawflies. a. Ants. h. Stinging Hymenoptera. p. Parasitic Hymenoptera.	l. Ladybirds. c. Carabs. b. Other Beetles.	b. Butterflies. m. Moths.	b. Blow-flies. f. Other Flies.	b. Plant Bugs. p. Psyllids. a. Aphides. s. Scale. c. Cicadas.	c. Crop Seed. s. Wild Seed. b. Buds, Leaves, &c. f. Crop Fruit. w. Wild Fruit.
352	*Merops ornatus*, L.	Bee Eater	.....	.....	.....	b	.....	.....	.....	.....
353	*Eurostopodus albigularis*, V. & H.	Nightjar	.....	.....	.....	b 84	m 85†	.....	.....	.....
361	*Cuculus pallidus*, Lath.	Pallid Cuckoo	.....	.....	.....	.....	m 86	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m	.....	.....	.....
	,, ,,	,,	c 88	.....	.....	.....	m 87	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m 89	.....	.....	.....
362	*Cacomantis flabelliformis*, Lath.	Fantail Cuckoo	.....	.....	.....	.....	m 90	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m 91	.....	.....	.....
	,, ,,	,,	.....	.....	s 92	.....	m 93	.....	.....	.....
	,, ,,	,,	.....	.....	.....	b	m 94	.....	.....	.....
364	,, *variolosus*, Horsf.	Square-tailed Cuckoo	.....	.....	.....	.....	m 95	.....	.....	.....
366	*Chalcococcyx basalis*, Horsf.	Bronze Cuckoo	.....	.....	.....	b	m	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m	.....	.....	.....
368	*Chalcococcyx plagosus*, Lath.	Bronze Cuckoo	.....	.....	.....	.....	m 96	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m 97	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m 98	.....	.....	.....
384	*Hirundo neoxana*, Gld.	House Swallow	.....	.....	.....	.....	.....	f 99	.....	.....
387	*Petrochelidon ariel*, Gld.	Fairy Martin	.....	.....	a	b	.....	f	b	.....
388	*Microeca fascinans*, Lath.	Jacky Winter	.....	.....	a h	b	.....	.....	.....	.....
	,, ,,	,,	.....	.....	a h	b	.....	b	.....	.....
392	*Petroeca Legei*, Sharpe	Scarlet-breasted Robin	.....	.....	a	b	m	.....	b	s 100
396	*Erythrodryas rosea*, Gld.	Rose-breasted Robin	.....	.....	.....	b 101	.....	.....	.....	.....
400	*Smicrornis brevirostris*, Gld.	Short-billed Scrub Tit	.....	.....	a 102	.....	.....	.....	.....	.....
405	*Gerygone fusca*, Gld.	Brown Flycatcher	.....	.....	.....	.....	.....	.....	a	.....
	,, ,,	,,	.....	.....	.....	b 103	.....	.....	b	.....
	,, ,,	,,	.....	.....	a	.....	.....	.....	.....	.....
418	*Eopsaltria australis*, Shaw	Yellow Robin	s	.....	a	b	.....	.....	.....	.....

422	*Falcunculus frontatus*, Lath.	Crested Tit	.....	.....	.....	b	m	f	.....	.....
430	*Pachycephala rufiventris*, Lath.	Rufous-fronted Whistler	.....	.....	a	b	m	.....	b	.....
	,, ,,	,,	.....	.....	a	b	m	.....	.....	.....
	,, ,,	,,	.....	.....	h	.....	m	.....	b	.....
436	*Rhipidura albiscapa*, Gld.	White-shafted Fantail	n	.....	a 104	b	.....	f	b	.....
	,, ,,	,,	.....	.....	a	b	.....	f	.....	.....
	,, ,,	,,	.....	.....	a	b	.....	f	.....	.....
	,, ,,	,,	.....	.....	a	b	.....	f	.....	.....
442	,, *motacilloides*, V. & H.	Sweet Pretty Creature	.....	.....	.....	b 106	.....	f 107	.....	.....
	,, ,,	,,	n 105	.....	.....	b	.....	f	p	.....
457	*Graucalus melanops*, Lath.	Blue Jay	s n	.....	.....	.....	m	.....	p 108	b 109
	,, ,,	,,	.....	.....	.....	.....	m 110	.....	.....	.....
	,, ,,	,,	.....	l	h	b 111	m 112	.....	.....	.....
	,, ,,	,,	.....	.....	.....	b	m 113	.....	.....	.....
	,, ,,	,,	.....	.....	h	b 114	m	.....	.....	c 116
	,, ,,	,,	.....	.....	.....	b 116	.....	.....	.....	.....
	,, ,,	,,	.....	.....	.....	b	.....	.....	.....	.....
459	,, *mentalis*, V. & H.	,,	.....	.....	.....	c b 117	.....	.....	.....	.....
	,, ,,	,,	.....	.....	.....	b	.....	.....	.....	.....
462	*Campephaga humeralis*, Gld.	White-shouldered Caterpillar Eater.	.....	l	.....	.....	m 118	.....	.....	.....
	,, ,,	,, ,,	.....	l	.....	.....	m 119	.....	.....	.....
	,, ,,	,, ,,	.....	l	p 121	b	m 122	.....	.....	.....
	,, ,,	,, ,,	.....	l	.....	.....	m 120	.....	.....	.....
466	*Cinclosoma punctatum*, Lath.	Spotted Ground Thrush	.....	.....	a	b 123	.....	.....	.....	b 124
	,, ,,	,, ,,	.....	l	.....	b	.....	.....	.....	b f
	,, ,,	,, ,,	.....	.....	.....	b	m 125	.....	.....	b 126
485	*Cinclorhamphus rufescens*, V. & H.	Rufous-backed Singing Lark.	s	.....	a	b	.....	.....	.....	s
	,, ,,	,, ,,	s	l	.....	b	m	.....	b	.....
488	*Oreocichla lunulata*, Lath.	Lunulated Mountain Thrush.	.....	.....	a	b	m	.....	b	b
489	*Ephthianura albifrons*, Jard. & Selby	White-fronted Chat	.....	.....	.....	.....	m 127	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	m 127	.....	.....	.....
	,, ,,	,,	s	.....	a	b 128	.....	.....	.....	.....
490	,, *tricolor*, Gld.	Scarlet-fronted Chat	.....	l 129	.....	.....	b	b	.....	s
	,, ,,	,,	.....	l 129	.....	.....	b	b	.....	s
495	*Cisticola exilis*, V. & H.	Barley Bird	s	.....	a	b	m	.....	.....	.....
503	*Acanthiza nana*, V. & H.	Yellow Tit	.....	.....	a 130	b	m	f	b	.....
	,, ,,	,,	.....	.....	a	b	.....	.....	p s	.....
507	,, *reguloides*, V. & H.	Buff-rumped Tit	.....	.....	.....	c b 141	m 142	f	.....	.....
	,, ,,	,,	s	.....	.....	b 143	m	f	p	.....
508	,, *chrysorrhoa*, Quoy & Gaim.	Yellow-tail Tit	s	.....	h	.....	m	f	b p a	.....
	,, ,,	,,	.....	.....	.....	b 137	m 138	f	.....	.....
	,, ,,	,,	.....	.....	p	b	m 139	f	b a	.....
	,, ,,	,,	.....	.....	.....	b	m	.....	.....	.....
	,, ,,	,,	s	.....	.....	b 140	m	f	p	.....
509	,, *uropygialis*, Gld.	Chestnut-rumped Tit	.....	.....	.....	b 135	.....	.....	.....	s 136

* Mathews' Hand-list Birds of Australia. The "Emu" Supplement, Vol. XII, January, 1913.

† This series of figures corresponds with that used in the notes to this table beginning on page 108.

APPENDIX III—Native Birds—*continued.*

No.*			Neuroptera, &c.	Orthoptera.	Hymenoptera.	Coleoptera.	Lepidoptera.	Diptera.	Hemiptera.	Vegetable Food.
			c. Centipedes. m. Molluscs. s. Spiders. n. Neuropteras.	l. Locusts and Grasshoppers. o. Other Orthoptera.	s. Sawflies, a. Ants, h. Stinging Hymenoptera. p. Parasitic Hymenoptera.	l. Ladybirds. c. Carabs b. Other Beetles.	b. Butterflies, m. Moths.	b. Blow-flies. f. Other Flies.	b. Plant Bugs. p. Psyllids. a. Aphides. s. Scale. c. Cicadas.	c. Crop Seed. s. Wild Seed. b. Buds, Leaves, &c. f. Crop Fruit. w. Wild Fruit.
511	*Acanthiza lineata*, Gld.	Striated Tit	s n 134	.....	.....	b 133†	m	f	p a	.....
512	,, *pusilla*, White	Brown Tit	n 132	.....	a p 131	b	m	f	p	.....
530	*Malurus cyaneus*, Ellis.	Cocktail	.....	.....	.....	.....	m 144	f	.....	.....
560	,, *superciliosus*, Gld.	White-eyebrowed Wood Swallow.	.....	.....	a	b	m 144½	.....	.....	.....
564	*Artamus sordidus*, Lath.	Dusky Wood Swallow (three examples).	.....	.....	a h	b	.....	.....	b	.....
	,, ,,	,, ,,	.....	.....	a h	.....	.....	.....	.....	.....
566	*Collyriocincla harmonica*, Lath.	Australian Thrush	.....	.....	.....	.....	b 145	.....	.....	.....
	,, ,,	,,	s	.....	.....	b	m	.....	.....	.....
	,, ,,	,,	.....	.....	.....	b	m	.....	.....	s
	,, ,,	,,	.....	.....	.....	c b 146	m 147	.....	.....	.....
	,, ,,	,,	s	.....	a p	c b 148	m 149	.....	.....	.....
575	*Grallina picata*, Lath.	Peewit	.....	.....	.....	c b 150	.....	.....	.....	c 151
	,, ,,	,,	.....	.....	.....	b 152	.....	.....	.....	.....
	,, ,,	,,	.....	o 154	.....	b 155	.....	.....	.....	b 157
583	*Neositta chrysoptera*, Lath.	Bark Peeker	.....	.....	.....	b	m	.....	.....	.....
	,, ,,	,,	s	o 163	.....	b	m	.....	.....	.....
	,, ,,	,,	.....	.....	.....	b 164	m	.....	.....	.....
	,, ,,	,,	.....	.....	.....	b	m	f	.....	.....
592	*Climacteris scandens*, Temm.	Brown Tree Creeper	.....	.....	a	b	m	.....	.....	b 165
	,, ,,	,,	.....	.....	a	b	.....	.....	.....	.....
	,, ,,	,,	s	.....	a 166	b	m	.....	.....	.....
	,, ,,	,,	.....	.....	a	b 167	.....	.....	.....	.....
593	,, *leucophœa*, Lath.	White-throated Tree Creeper.	.....	.....	a 168	b	.....	.....	.....	.....
599	*Zosterops dorsalis*, V. & H.	Silver Eye	.....	.....	.....	.....	m 169	.....	.....	.....
	,, ,,	,,	.....	.....	.....	.....	.....	.....	a 170	.....
	,, ,,	,, 5 examples trapped	.....	.....	.....	.....	.....	f 171	.....	f 173
	,, ,,	,, 13 ,, ,,	.....	.....	.....	.....	.....	.....	.....	f 172
	,, ,,	,,	s	.....	.....	b	.....	.....	b	f 173
	,, ,,	,,	s	.....	.....	.....	.....	.....	s 174	.....
	,, ,,	,,	.....	.....	.....	b 175	.....	.....	.....	f 176

602	*Dicæum hirundinaceum*, Shaw	Mistletoe Bird	s				m	f 177	a	
603	*Pardalotus striatus*, Temm.	Diamond Bird				b		f	s 178	
	" "	"			a	b		f	p s	
	" "	"						f	p	
606	" *punctatus*, Shaw	Spotted Diamond Bird							s 179	
	" "	" "				b	m	f	b p s 180	
619	*Melithreptus brevirostris*, V. & H.	Short-billed Honey Eater	s		a		m		b	
	" "	" "	s		a	b 181 c	m 182			
	" "	" "				b	m	f	b	
621	*Plectorhyncha lanceolata*, Gld.	Lanceolated Honey Eater							b 183	s 184
622	*Myzomela sanguinelenta*, Lath.	Blood Bird						f 185	a	
	" "	"				b 185		f		
627	*Acanthorhynchus tenuirostris*, Lath.	Spinebill						f 186		
	" "	"						f		
638	*Meliphaga phrygia*, Shaw	Mock Regent Bird			p h	b 187		f 188	b	
	" "	"						f 189	b	
	" "	"			h	b	m	f		b 190
643	*Ptilotis fusca*, Gld.	Brown Honey Eater	s		h	b		f		
	" "	"			a			f	p	
	" "	"			a p 191	b		f	p s	
	" "	"			a	b				
	" "	"			a	b		f	p	
648	" *chrysops*, Lath.	Yellow-cheeked Honey Eater.				b 192				
652	" *auricomis*, Lath.	Yellow-tufted Honey Eater.			a	b 193		f		
	" "	" "			a h	b				
661	" *penicillata*, Gld.	White-eared Honey Eater				b 194		f		
669	*Meliornis sericea*, Gld.	White-cheeked Honey Eater.			h	b 195			b	
672	*Myzantha garrula*, Lath.	Soldier Bird				b				
	" "	"			a	b 196	m			
	" "	"			a	b				
	" "	"			a	b				
	" "	"			a				b 197	
	" "	"			a	b 198				
	" "	"				b				f 199
675	*Acanthochæra carunculata*, Lath.	Gill Bird			a	b 200				
	" "	"			h		m 201		p 202	
	" "	"			a p 203				p 204	
	" "	"			a					b 205
677	*Anellobia mellivora*, Lath.	Brush Wattle Bird	s		h	b		f		s 206
679	*Acanthogenys rufigularis*, Gld.	Spiny-cheeked Honey Eater.				b				
680	*Entomyza cyanotis*, Lath.	Blue Eye							b 207 s 208	
682	*Tropidorhynchus corniculatus*, Lath.	Leather Head				b 209				
	" "	"				b 210				

* Mathews' Hand-list Birds of Australia. "The Emu" Supplement, Vol. XII, January, 1913.

† This series of figures corresponds with that used in the notes to this table beginning on page 108.

APPENDIX III—Native Birds—*continued.*

No.*			Neuroptera, &c.	Orthoptera.	Hymenoptera.	Coleoptera.	Lepidoptera.	Diptera.	Hemiptera.	Vegetable Food.
			c. Centipedes. m. Molluscs. s. Spiders. n. Neuroptera.	l. Locusts and Grasshoppers. o. Other Orthoptera.	s. Sawflies. a. Ants. h. Stinging Hymenoptera. p. Parasitic Hymenoptera.	l. Ladybirds. c. Carabs. b. Other Beetles.	b. Butterflies. m. Moths.	b. Blow-flies. f. Other Flies.	b. Plant Bugs. p. Psyllids. a. Aphides. s. Scale. c. Cicadas.	c. Crop Seed. s. Wild Seed. b. Buds, Leaves, &c. f. Crop Fruit. w. Wild Fruit.
687	*Anthus australis*, V. & H.	Ground Lark	s	.....	a	c b 212†	m	.....	b	.....
	,, ,,	,,	s	.....	a	c b 212	m	.....	.....	.....
	,, ,,	,,	.....	.....	a	c b 213	m 214	.....	.....	s 215
	,, ,,	,,	.....	.....	.....	b	.....	.....	s 216	s 217
	,, ,,	,,	.....	l	.....	b	m 218	.....	.....	.....
688	*Mirafra Horsfieldi*, Gld.	Native Singing Lark	.....	.....	.....	.....	.....	.....	.....	s 219
692	*Stagonopleura guttata*, Shaw	Diamond Sparrow	.....	.....	.....	.....	.....	.....	.....	c 220 s
712	*Oriolus viridis*, Lath.	Olive-backed Oriole	.....	.....	.....	.....	.....	.....	.....	f 221 w
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	f 222
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	f 223
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	f 224
732	*Corvus coronoides*, V. & H.	Hazel-eyed Crow	.....	.....	.....	.....	.....	.....	.....	c 225
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	c 226
	,, ,,	,,	.....	.....	.....	b 227	.....	.....	.....	s b 228
	,, ,,	,, (229)	.....	.....	.....	.....	.....	.....	.....	.....
	,, ,,	,,	.....	.....	.....	b 230	.....	.....	.....	s
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	b 231
	,, ,,	,, (232)	.....	.....	.....	.....	.....	.....	.....	.....
	,, ,,	,,	.....	.....	.....	b	.....	.....	.....	c 233
	Species unknown	Crow	.....	.....	.....	.....	.....	.....	.....	c 234
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	c 235
734	*Corvus australis*, Gld.	White-eyed Crow—Raven	.....	.....	.....	c b 236	.....	.....	.....	.....
	,, ,,	,, ,,	.....	l 237	h	c	.....	.....	.....	c b 238
	,, ,,	,, ,,	.....	.....	h	b 239	.....	f 240	.....	c b 241
	,, ,,	,, ,,	m 242 s	.....	.....	b 243	.....	f 244	.....	s
	,, ,,	,, ,,	.....	.....	.....	.....	.....	.....	.....	s 245
	,, ,,	,, ,,	.....	.....	.....	b 246	.....	.....	.....	.....
	,, ,,	,, ,,	s	o 247	a h	.....	.....	.....	.....	b 248
735	*Strepera graculina*, White	Mountain Magpie	.....	.....	.....	.....	.....	.....	.....	b 249
	,, ,,	,,	.....	.....	.....	.....	.....	.....	.....	b 250
738	,, *anaphonensis*, Temm.	Grey Bell Magpie	.....	.....	a h 251	b 252	.....	.....	.....	.....
745	*Cracticus destructor*, Temm.	Butcher Bird	.....	.....	.....	.....	.....	.....	c	.....
	,, ,,	,,	s	.....	a	b	m	.....	.....	.....

745	*Cracticus destructor*, Temm.	Butcher Bird	s	.....	a 159	b 160	.....	.....	.....	s
747	*Gymnorhina tibicen*, Lath.	Magpie	.....	.....	a h	b 161 b	m 158	.....	s 162	.....

Introduced Birds.

Turtur ferrago	Indian Dove	.....	.....	.....	.....	.....	.....	.....	f 253
Passer domesticus	Sparrow	.....	o 254	.....	.....	m 255	.....	.....	.....
" "	"	.....	.....	.....	.....	m 256	.....	.....	.....
" "	"	.....	.....	.....	.....	m 257	.....	.....	.....
" "	"	.....	f 258	.....	.....	.....	.....	.....	.....
" "	" (24 birds)	.....	.....	.....	.....	.....	.....	.....	c 259
" "	" (40 ")	.....	.....	.....	.....	.....	.....	.....	c 260 s
" "	" (20 ")	.....	l	a p	c b	m	f	a 261	.....
" "	"	.....	.....	a	.....	.....	.....	.....	c 262 s b
" "	" (4 birds)	.....	.....	.....	b	.....	.....	.....	c
" "	" (8 ")	.....	.....	.....	.....	.....	.....	.....	c s
" "	" (15 ")	.....	.....	a	b	m	.....	a	.....
" "	" (5 ")	.....	.....	.....	.....	.....	.....	.....	c
" "	"	.....	.....	.....	.....	.....	.....	a 263	.....
" "	"	.....	.....	.....	b	.....	b 264	.....	c s
Sturnus vulgaris	Starling	.....	.....	.....	.....	.....	.....	c	.....
" "	"	.....	l	.....	.....	.....	.....	.....	f
" "	"	.....	.....	.....	.....	m 265	.....	.....	b
" "	"	.....	.....	.....	b 266	m 267	.....	.....	.....
" "	"	.....	.....	.....	c b 268	m 269	.....	.....	b
" "	"	.....	.....	.....	c b 270	m 271	.....	.....	b
" "	"	.....	.....	.....	c b	m 272	.....	.....	b
" "	"	.....	.....	.....	c	m 273	.....	.....	b
" "	"	.....	.....	.....	b 274	m 275	.....	.....	.....
" "	"	.....	.....	.....	b	.....	.....	.....	.....
" "	"	.....	.....	.....	.....	m 276	.....	.....	.....
" "	"	m 280 s	.....	.....	c 277b	m 278	.....	b	b 279
" "	"	.....	.....	.....	b	.....	.....	.....	.....
" "	"	s	.....	.....	c b 281	m 282	.....	.....	b
" "	"	.....	.....	.....	c b 283	m 284	f	.....	s b
" "	"	s	.....	.....	b	m	.....	.....	s
" "	"	.....	.....	.....	c b	m	.....	.....	b s 285
" "	"	s	.....	.....	c b	m 286	.....	b	b 287
" "	"	.....	.....	a	b	m	.....	b	s
" "	"	s	.....	a	b	m	.....	b	s
" "	"	.....	.....	a	b 288	.....	f 289	p s 290	.....
" "	"	s	.....	.....	c b	.....	f 291	.....	s

* Mathews' Hand-list Birds of Australia. "The Emu" Supplement, Vol. XII, January, 1913.

† This series of figures corresponds with that used in the notes to this table beginning on page 108.

Notes to the Bird Food List.

Numbers 490, 509, 621, 679, 680 were obtained at Coolabah in Western New South Wales; *Turtur ferrago* at Sydney. All the other birds examined were obtained around Richmond.

It is to be understood that the indications as to nature of the food refer to such whole insects or portions of insects (or such plant food articles) as to which the family, genus, or other classificatory group name could be positively identified. Where there was any doubt, such is stated.

The bird numbers given in the preceding table are in accordance with a Hand-list of the Birds of Australia—Gregory M. Mathews—in supplement to "The Emu," Vol. XII, January, 1913.

The figures at the left of the following notes correspond with those in the body of the preceding table.—C.T.M.

1. Millet; also vegetable matter.
2. Summer grass seed plentiful (*Panicum sanguinale*), also *Solanum nigrum* (black potato).
3. *P. sanguinale*, *S. nigrum*, and *Portulaca oleracea*, with other vegetable matter.
4. Army worm larvæ.
5. Four birds examined. Contents entirely grass and weed seeds.
6. Seeds of chickweed, fruits of buttercup, with other vegetable matter.
7. A longhorn.
8. Clover seeds, and green vegetable matter.
9. Rutherglen bug (*Nysius vinitor*), with fragments of other insects.
10. Twenty-eight grains wheat in crop; seven in stomach.
11. *Setaria glauca*, *Panicum sanguinale*, and a black seed.
12. Same as 11, with *Polygonum aviculare* added.
13. Two kinds grass seed and two kinds legumes.
14. Very varied seeds, grass, legumes, and oat.
15. *Casuarina glauca*, *Euphorbia peplus*, *Setaria glauca*, and another grass; an amarantus.
16. Approximately 70 seeds *Panicum crus-galli*, 100 *P. sanguinale*, 150 *Portulaca oleracea*; small gravel.
17. Approximately 4,000 seeds in crop: summer grass chiefly, also chickweed and a trefoil.
18. Approximately 500 summer grass seeds (*P. sanguinale*), 2,000 pigface (*Portulaca oleracea*), a few fat hen (*Chenopodium*).
19. Five grammes seed, 7,230 summer grass, 4,480 pigface, 8 fat hen.
20. Grass, wattle, and other legumes.
21. *Dytiscus* and scarabs.
22. A *Calosoma*.
23. Scarabs.
24. Cutworm larvæ, and some pink larvæ.
25. Fragments of vegetable matter, and gravel.
26. Water plants, *Nitella* chiefly, and gravel.
27. Water beetles; a considerable quantity.
28. Water bugs; a considerable quantity.
29. Unio, the fresh-water mussel.
30. Seeds of *Panicum crus-galli* (a water grass).
31. Weevils and scarabs.
32. Water beetles.
33. Dragon fly larvæ.
34. Dragon fly larvæ.
35. Fragments of *Confervæ*.
36. Corbicula (a river bivalve), with fragmentary vegetable matter.
37. Frogs.
38. Weevils.
39. Bones and feathers of birds, evidently all pigeon.
40. Bones and feathers of four sparrows.
41. Two mice in crop, three in stomach.
42. Stomach full of mice.
43. Five mice in stomach.
44. Four mice in stomach.
45. Two mice and a lizard.
46. Stomach full, measured 2½ x 1⅜ x 1 inch. Contained brown feathers, &c., probably sparrow.

47. Three different species.
48. Remains of mice.
49. Large quantity.
50. Large quantity fragmentary insects, mostly beetles.
51. Remains of mice.
52. Wattle (*Acacia decurrens* and *elata*, divested of seed coats), hundreds of eucalyptus seed.
53. As 52. About half of each kind of seed.
54. 15 c.c. of seed. Grass mainly; a few legumes, and what appear to be tea-tree seed (*Leptospermum*).
55. Large quantity of seed, apparently tea-tree, as 54.
56. Crop very full; much distended with seed, chiefly grass.
57. A lamellicorn.
58. Maize. Vegetable tissue and grass also present, with a little black carbonaceous matter.
59. 8·08 grammes cracked maize.
60. 4·09 grammes of an unknown seed.
61. Crop full of seed; some disintegrated vegetable matter.
62. Gravel, charcoal, fragmentary vegetable matter, wattle and several other kinds of seed.
63. In crop a considerable number of pupa cases, almost certainly *Diptera*, possibly blow-flies.
64. Gravel and various seeds unknown.
65. An example of *Helix jervisensis* with animal still in shell; fragments of a second. Vegetable matter and soil.
66. Great quantity of scarabs.
67. Two centipedes.
68. A *Paropsis* and a longicorn recognised. Stomach much distended with insect food.
69. *Calosoma schayeri*.
70. Army-worm moth.
71. *Anaplognathus* (cockchafer).
72. *Thynnus, Bembex*.
73. Buprestids.
74. Three large cockchafer larvæ. Unrecognisable animal matter and two hard balls covered with furry matter.
75. A wood bug, much animal matter, sand, soil.
76. Included weevils and scarabs.
77. A wattle twig, and twigs of a herbaceous plant.
78. Three centipedes.
79. *Rutilia* (large blue-black fly).
80. Dragon flies.
80½. Five bees.
81. Bees.
82. Sixteen bees.
83. *Anaplognathus* (cockchafer).
83½. Five noctuids.
84. Also a small egg cocoon with eggs (unknown).
85. Larvæ of grape vine moth.
86. Larvæ of *Doratifera*.
87. Ten *Doratifera* larvæ (cup moth).
88. One julus (millipede).
89. 35 cutworm larvæ, one hairy larva (unknown), 1 vine moth larva.
90. 25 hairy larvæ (perhaps Teara).
91. 15 spiny larvæ, green with red markings.
92. *Pterygophilus cinctus*.
93. 20 heads of a white spotted larva.
94. Several larvæ like cutworms, but reddish in colour.
95. Larvæ of *Doratifera*.
96. Hairy larvæ (like *Teara*), with a number of yellow eggs.
97. Five *Doratifera* (cup moth).
98. Ten *Doratifera*.
99. Entirely house flies. Bird caught in class room.
100. One grass seed.
101. And undetermined insects; some probably hemiptera.
102. Large quantity.
103. Including weevils, and a chrysomelid larva—possibly the wattle beetle.
104. Many fragments of insects and some eggs.
105. A *Hemerobius* wing and some eggs.

106. Included a chrysomelid and a small scarab.
107. Included a *Tipula*.
108. A leaf hopper. Fruit skin present (probably grape).
109. Green lacewing fly (*Chrysopa*).
110. Five larvæ of *Doratifera*; some small stones.
111. A paropsis; weevils; a spotted chrysomelid; animal matter (muscle and fat).
112. One bagworm in its silky bag, and several larvæ of same.
113. Four black-spotted larvæ, one pinkish larva. Animal matter (muscle and fat.
114. Two species cockchafer (*Anaplognathus*).
115. Grape seeds.
116. Stomach full. Three species scarabs recognisable.
117. Chiefly scarabs.
118. Twelve cutworm larvæ.
119. Cutworm larvæ.
120. Cutworm larvæ.
121. An ichneumon; a number of oval insect eggs.
122. Twenty heads of cutworm larvæ, and four "looper" larvæ.
123. Numerous and varied insects, but very fragmentary.
124. Wattle, some other legumes, and other seed unrecognised.
125. A *Doratifera* larva, and eggs of insects.
126. Seeds of native currant and of native grasses.
127. Larvæ of cabbage moth.
128. Included a cockchafer larva and wireworm larvæ.
129. Large quantity fragmentary remains; also insect eggs.
130. And a hymenopterous wing, probably a braconid.
131. Chalcid flies.
132. Chrysopa larva, and some insect eggs.
133. A weevil.
134. Eggs of lacewing fly, on their flexible stalks.
135. Very fragmentary.
136. *Chenopodium* seeds.
137. Carabs and weevils.
138. Cutworm and bag-moth larvæ.
139. Six green larvæ, possibly cabbage moth.
140. A chrysomelid.
141. Elaters, &c., remains very fragmentary.
142. Four cutworm larvæ.
143. Weevils.
144. Cutworm larvæ.
144½. Six larvæ.
145. Seen in the act, taking a *Danais*.
146. Weevils and scarabs.
147. *Doratifera* larvæ.
148. A weevil and a longicorn.
149. *Doratifera* (larvæ) and others. Stomach very full.
150. Scarabs chiefly.
151. A considerable quantity of maize seed, just germinating.
152. Cockchafer larvæ.
153. Earthworms.
154. A mole cricket.
155. Scarabs, an elater, a weevil.
156. Four earthworms.
157. Little grass.
158. Eight hawk moth larvæ, black and yellow.
159. Large quantity (99 per cent. of contents) of soldier ants. One pair jaws fixed to skin of throat.
160. Scarabs.
161. Scarabs.
162. Like red scale. Possibly the scale on Carob bean in college garden.
163. A wood bug.
164. Weevils.
165. Flower buds.
166. Including soldier ants.
167. One elater whole, a scarab, and quantity fragmentary insect remains.
168. Four examples under this number all contained the same kinds of insects.
169. Larvæ of cabbage moth.
170. Aphides from sorghum.

171. Remains of small insects and fruit flesh.
172. Remains of fruit flesh the only food present.
173. Fruit flesh (probably fig).
174. Number of young black scale, and other fragmentary insect remains.
175. And fragmentary insect remains.
176. Flowers, seeds and flesh of fig.
177. Syrphid flies.
178. From eucalypts.
179. From eucalypts.
180. Large number (150) of a dirty white scale insect.
181. Weevils amongst others.
182. Ten larvæ.
183. Green bug and fragmentary insect remains.
184. Wilga seeds (*Geijera parviflora*).
185. Fragmentary remains of different kinds of insects.
186. Remains very small. Larvæ and eggs of small unrecognised insect, possibly scale!
187. Weevils and scarabs.
188. A bee fly.
189. Many fungus gnats (*Mycetophilidæ*).
190. Many pollen grains (indicating the haunting of flowers).
191. Braconids.
192. *Repsimus* legs recognisable; many small insects, but remains very fragmentary.
193. Included a buprestid.
194. Remains fragmentary and small. Beetles and flies almost certainly recognisable.
195. Included bright green flower beetles (*Diphucephala*) and some insect eggs.
196. One weevil, one buprestid; stomach very full.
197. And five insect eggs.
198. Shot amongst fig trees in College orchard.
199. Fragments of spiral vessels and cells, probably fig. Shot in College orchard.
200. Included a buprestid. Food articles chiefly ants.
201. A *Doratifera* larva.
202. A *Psylla*, black with white spots.
203. Braconids apparently; some hundreds.
204. Psyllids plentiful.
205. Contents of stomach examined by Mr. C. Potts, B.A., showed an appreciable quantity of glucose sugar present. In four other examples the stomachs were empty, but tests showed glucose sugar to be present. Been feeding on flower nectar.
206. Wilga and *Chenopodium* seed, with fragmentary insect remains.
207. A green bug (*Cuspicona* type).
208. A white scale, with fragmentary insect remains.
209. Elaters, buprestids, and scarabs.
210. One *Paropsis*, weevils, and scarabs.
211. Numerous small oval black unrecognised seeds.
212. Wireworms.
213. Weevils and flea beetle.
214. Cutworm larvæ.
215. Summer grass seed.
216. Believed to be a male scale insect amongst food.
217. Fifty seeds of *Polygonum aviculare*, a few of *P. lapathefolium*, and fruits of some small plant, unrecognised.
218. Cutworm larvæ.
219. Seeds of a grass and of a *Polygonum*.
220. *Paspalum* seed, and some fragmentary insect remains.
221. Fig remains, also fruits of camphor laurel and *Celtis australis*.
222. Fruits of camphor laurel and *Celtis australis*.
223. Camphor laurel fruits.
224. White cedar berries.
225. Digging up wheat. Bird suffering from lice and a louse fly (*Hippobosca*).
226. Sheep's wool present. (Crows had been observed on a dead sheep.)
227. A scarab larva.
228. And other vegetable remains, including seed pod of a cress.
229. Two birds. Stomach contained bones (mouse?) and unrecognisable insect remains.
230. Scarabs; also hair and bones of mice.
231. Grass, a seed capsule, and the outer glume of an oat.
232. Pig (?) hair (black), small bones, unrecognisable vegetable matter.
233. Maize and wheat fragments, also field peas. Egg shell; large pieces bone, up to $\frac{3}{4}$ inch diameter; mouse hair.

234. Peas (left uncovered in drill).
235. Maize in the cob.
236. Also feathers and bones of a young bird, probably unhatched chicken.
237. Egg case of mantis, also bone and flesh, hair, a feather.
238. Grass leaves.
239. A cockchafer.
240. *Tipula.*
241. Grass leaves; also a feather, and other unrecognisable matter.
242. Probably *Unio* (a freshwater bivalve).
243. Weevils and a wireworm.
244. Larva, unknown; also a pellet of mouse hair; small feathers; vegetable matter.
245. Also some sheep's wool.
246. Thin slices of potato; horse, cow (?) and mouse hair; small bones.
247. White ants.
248. Grass leaves.
249. Native grape fruit and seeds; four Loranth fruits; helmet orchid flowers; buds and other plant remains.
250. Green leaves and tree twigs.
251. Bees; stomach fairly full: entirely insect food.
252. Scarabs and elaters.
253. Figs.
254. White ants when flying.
255. Perfect insects; species unknown.
256. Cabbage moth larvæ.
257. Cutworm larvæ.
258. Seen in a flock jumping at the locusts as they rose from ground.
259. All these birds had fed on maize and wheat.
260. In addition to wheat and maize, stomach contained grass seed, various weed seeds, and in one case 240 seeds of wire-weed (*Polygonum aviculare*).
261. Also grass seeds and various insects.
262. 400 seeds millet, little maize, 40 summer grass seeds, 14 cat's ear seeds, and some wire-weed seed.
263. Watched feeding on aphides on roses.
264. Two blow-flies (*Calliphora oceanica*) in stomach. 6 March, 1905.
265. 17 cutworm larvæ; one lucerne leaf.
266. Elaters and scarabs.
267. 15 cutworm larvæ.
268. Elaters and scarabs.
269. Seven cutworms
270. Weevils.
271. Ten cutworm larvæ.
272. Eight cutworm larvæ.
273. Twelve cutworm larvæ.
274. Elaters and scarabs.
275. Eight cutworm larvæ.
276. Five cutworm larvæ.
277. Three larvæ, three beetles.
278. 17 cutworm larvæ, and about eight others, partly digested.
279. Lucerne.
280. A freshwater mollusc, *Planorbis.*
281. Wireworms, weevils.
282. 17 cutworm larvæ.
283. Wireworms, weevils.
284. 15 cutworm larvæ.
285. Seeds of *Polygonum aviculare, Eragrostis,* and summer grass.
286. Nine *Plusia* larvæ.
287. Including portions of an orange coloured fungus (*Clavaria ?*).
288. Scarabs, weevils, elaters, chrysomelsdi,and a coccinellid carapace.
289. Five rat-tailed larvæ (*Eristalis tenax*), and 30 dipterous larvæ like *Tabanus,* some larvæ resembling blood-worm (*Chironomus*); five other dipterous larvæ; also some fungus gnats (*Mycetophilidæ*).
290. Resembling red scale; unrecognisable insect remains.
291. Very similar food articles to 289; several *Eristalis* larvæ.

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